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ABSTRACT

This book summarizes approximately 500 reports of reading research identified between July 1, 1994 and June 30, 1995. The research studies in the book are categorized into 6 major areas: (1) summaries of reading research; (2) teacher preparation and practice; (3) sociology of reading; (4) physiology and psychology of reading; (5) the teaching of reading; and (6) reading of atypical learners. All but the first category in the book are further subcategorized, and individual studies within subcategories are grouped by subject. An author index and a list of journals monitored conclude the book. (RS)

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Annual Summary Investigations Relating to Reading

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Sam Weintraub

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Annual Summary of Investigations Relating to Reading

July 1, 1994 to June 30, 1995

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Annual Summar
Relating to Rea
July 1, 1994 to

I. *Summaries of re*
II. *Teacher prepara*
II–1 Behav
prac
II–2 Belief
II–3 Prese
II–4 Roles
II–5 Evalu

III. *Sociology of re*
III–1 Role
III–2 Cont
III–3 Read
III–4 Reac
III–5 Reac
III–6 Libr
III–7 Soci
III–8 Lite
III–9 Hist
III–10 Nev
III–11 His
III–12 Boo
III–13 Juv
III–14 Cer
III–15 Eff
III–16 Re
III–17 Re

IV. *Physiology*
IV–1 Ph
IV–2 Sc
IV–3 In
IV–4 M
IV–5 E
IV–6 V
IV–7 A
IV–8 F
IV–9 V
IV–10 I
IV–11 C
IV–12 I
IV–13
IV–14
IV–15

BEST COPY AVAILABLE

Annual Summary of Investigations Relating to Reading July 1, 1994 to June 30, 1995

I. *Summaries of reading research* 2

II. *Teacher preparation and practice*

II–1 Behavior, performance, knowledge, practices, effectiveness 2

II–2 Beliefs and attitudes toward reading 8

II–3 Preservice and inservice preparation 14

II–4 Roles 21

II–5 Evaluation of programs and materials 23

III. *Sociology of reading*

III–1 Role and use of mass media 25

III–2 Content analysis of printed materials 27

III–3 Readability, legibility, and typology 31

III–4 Reading interests, preferences, habits 32

III–5 Readership 32

III–6 Library usage and services 34

III–7 Social and cultural influences on reading 35

III–8 Literacy and illiteracy 35

III–9 History of literacy 41

III–10 Newspaper publication 41

III–11 History of newspapers and magazines 43

III–12 Book and magazine publication 43

III–13 Juvenile books and textbooks 45

III–14 Censorship and freedom of the press 45

III–15 Effects of reading 47

III–16 Reaction to print 48

III–17 Research techniques 51

IV. *Physiology and psychology of reading*

IV–1 Physiology of reading 51

IV–2 Sex differences 57

IV–3 Intellectual abilities and reading 59

IV–4 Modes of learning 61

IV–5 Experiments in learning 61

IV–6 Visual perception 66

IV–7 Auditory Perception 69

IV–8 Reading and language abilities 70

IV–9 Vocabulary and word identification 77

IV–10 Factors in interpretation 82

IV–11 Oral reading 83

IV–12 Rate of reading 86

IV–13 Other factors related to reading 87

IV–14 Factors related to reading disability 89

IV–15 Sociocultural factors and reading 96

IV–16 Reading interests 99
IV–17 Attitudes and affect toward reading 103
IV–18 Personality, self-concept, and reading 104
IV–19 Readability and legibility 106
IV–20 Literacy acquisition 107
IV–21 Studies on the reading process 111
IV–22 Comprehension research 117
IV–23 Research design 125

V. *The teaching of reading*
V–1 Comparative studies 126
V–2 Status of reading instruction 128
V–3 Emergent literacy 130
V–4 Teaching reading—primary grades 131
V–5 Teaching reading—grades 4 to 8 136
V–6 Teaching reading—high school 140
V–7 Teaching reading—college and adult 143
V–8 Instructional materials 144
V–9 Teaching—grouping/school organization 146
V–10 Corrective/remedial instruction 149
V–11 Teaching bilingual and other language learners 158
V–12 Tests and testing 161
V–13 Technology and reading instruction 166

VI. *Reading of atypical learners*
VI–1 Visually impaired 168
VI–2 Hearing impaired 171
VI–3 Mentally handicapped 172
VI–4 Neurologically impaired and brain injured 174
VI–5 Other atypical learners 180

List of journals monitored 181

Author index 184

Abbreviations

Abbreviations have been used with certain terms and test names that appear frequently in reading research reports.

TERMS

ANCOVA	Analysis of Covariance
ANOVA	Analysis of Variance
CA	Chronological Age
CAI	Computer Assisted Instruction
CRT	Cathode Ray Tube
DRA	Directed Reading Activity
DRTA	Directed Reading-Thinking Activity
EH	Emotionally Handicapped
EMR	Educable Mentally Retarded
ESL	English as a Second Language
GPA	Grade Point Average
IQ	Intelligence Quotient
L1	First Language
L2	Second Language
LD	Learning Disabled
LVF	Left Visual Field
MA	Mental Age
MANOVA	Multivariate Analysis of Variance
RA	Reading Age
RD	Reading Disabled
RT	Reaction Time
RVF	Right Visual Field
SES	Socioeconomic Status
VF	Visual Field

TESTS

ACT	American College Test
CAT	California Achievement Test
CTBS	Comprehensive Tests of Basic Skills
DRP	Degrees of Reading Power
GMRT	Gates-MacGinitie Reading Tests
GORT	Gray Oral Reading Test
IRI	Informal Reading Inventory
ITBS	Iowa Test of Basic Skills
ITPA	Illinois Test of Psycholinguistic Abilities
MAT	Metropolitan Achievement Tests
MRT	Metropolitan Readiness Test
NARA	Neale Analysis of Reading Abilities
NDRT	Nelson-Denny Reading Test
PIAT	Peabody Individual Achievement Test
PMAT	Primary Mental Abilities Test
PPVT	Peabody Picture Vocabulary Test
RMI	Reading Miscue Inventory
RPM	Raven's Progressive Matrices

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SAT	Scholastic Assessment Test
Schonell	Schonell Graded Word Reading Test
SDRT	Stanford Diagnostic Reading Test
SIT	Slosson Intelligence Test
Spache DRS	Spache Diagnostic Reading Scales
SRA	SRA Achievement Series
TORC	Test of Reading Comprehension
WAIS-R	Wechsler Adult Intelligence Scale–Revised
WISC-R	Wechsler Intelligence Scale for Children–Revised
WJPEB	Woocock-Johnson Psycho-Educational Battery
WPPSI	Wechsler Preschool and Primary Scale of Intelligence
WRAT	Wide Range Achievement Test
WRMT	Woodcock Reading Mastery Test

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*Annual Summary of Investigations Relating to Reading July 1, 1994 to June 30, 1995**

SUMMARIZES reports of reading research identified between July 1, 1994, and June 30, 1995. The research studies are categorized into six major areas, five of which have been further subcategorized. As in previous years, the majority of studies reported were classified into the Physiology and Psychology of Reading category. Over 300 journals are monitored for inclusion along with monographs, books, conference proceedings, and yearbooks.

Order of Studies Within Subcategories

STUDIES in the Annual Summary are subcategorized under five of the six major categories (Category 1 consists of general reviews only and is not subcategorized). Within any one subcategory will appear a number of loosely related studies. While all the research within one category falls under the same general rubric, the studies will vary markedly in emphasis, in the question being addressed, and/or in the focus. Thus, studies have been grouped within subcategories also. For example, under Factors Related to Reading Disability, those studies that address dyslexia appear together, while those that deal with strategies used by good and by poor readers would be placed in juxtaposition. The reader looking for research on one particular aspect of reading disabilities would then find them all in one spot rather than dispersed haphazardly throughout the subcategory as might be the case if they were listed alphabetically by author.

*Materials for inclusion were identified by Reongrudee Naranunn, a doctoral student in the Reading Program at SUNY at Buffalo. A special debt of gratitude is due to Eunice Garey who serves as the secretary for the *Summary* and keeps track of where everything is. Thanks, too, to Bill Strachan, a very conscientious and dedicated work study student who did the photocopying of identified materials. I am indebted, too, to Janet Parrack and the staff at IRA Headquarters for their careful editing of the manuscript and for their help in numerous other ways.

I. Summaries of reading research

SAKS, A.L., & LARSON, RICHARD L. (1994, December). Annotated bibliography of research in the teaching of English. *Research in the Teaching of English, 28*, 418–436.

Presents annotations of selected research in the teaching of English. Items included are drawn from dissertation abstracts as well as from articles and books published from January to June preceding the issue. Annotations are categorized under the following major headings: curriculum, language, literature, research education, teacher education, and writing.

LARSON, RICHARD L., & SAKS, A.L. (1995, May). Annotated bibliography of research in the teaching of English. *Research in the Teaching of English, 29*, 239–255.

Covers the time period from July to December preceding the publication of the article. Selected research is cited, annotated, and categorized under seven major categories. Several of the categories are further subdivided. Included are books, articles, and dissertations.

WEINTRAUB, SAM; SMITH, HELEN K.; ROSER, NANCY L.; MOORE, WALTER J.; JONGSMA, KATHLEEN S.; DOYLE, MARY ANNE E.; CEPRANO, MARIA A.; TRUSCOTT, DIANE M.; & WATTS, SUSAN M. (1995). *Annual summary of investigations relating to reading, July 1, 1993 to June 30, 1994*. Newark, DE: International Reading Association.

Abstracts and categorizes research identified in the period from July 1, 1993, to June 30, 1994. The research is categorized under six major areas, five of which are further subcategorized. The major categories include summaries of reading research, teacher preparation and practice, sociology of reading, physiology and psychology of reading, teaching of reading, and reading of atypical readers.

II. Teacher preparation and practice

II–1 Behavior, performance, knowledge, practices, effectiveness

VAN KRAAYENOORD, CHRISTINA E., & PARIS, SCOTT G. (1994). Literacy instruction in Australian primary schools. *The Reading Teacher, 48*, 218–228.

Describes current literacy practices in Australia, reviews the history of instructional trends, and discusses the contexts of professional development for Australian teachers. The most popular, current methods of literacy instruction were described as holistic, language-oriented, child-centered, and based on meaningful activities. Language experience methods as well as reading schemes and genre-based approaches were reported to be evident across Australia. Some programs were based on children's literature, but many others were grounded in content areas. Teachers implemented instruction in literacy according to their state syllabus, preservice training, available materials, student characteristics, and supporting personnel. Review of historical trends and influences revealed the impact of a number of theorists. It additionally revealed a progression in instructional approaches from the use of traditional texts approved by state governments, to the use of published reading schemes (i.e., basals), and to the application of holistic approaches to instruction, including language experience, process writing, and whole language approaches. In regard to professional development, it was reported that teachers learn about literacy instruction from their preservice training, teaching practice, and first jobs. Government documents and departmental officers were also reported to shape instructional practices. It was noted that there is a great deal of autonomy in how

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teachers instruct literacy but also much similarity among teachers because the sources of ideas are usually shared knowledge.

BLATCHFORD, PETER; IRESON, JUDITH; & JOSCELYNE, TRISH. (1994). The initial teaching of reading: What do teachers think? *Educational Psychology, 14*(3), 331–344.

Surveys British teachers on their reading instructional practices. Sought were clear descriptions of reading approaches from the teachers' point of view and the extent to which specific methodologies have been utilized. Semistructured interviews were conducted with 121 teachers roughly distributed over reception, year 1, year 2, and year 3 groups. Also interviewed were 65 head teachers and 67 language coordinators. Questions probed all respondents' overall instructional aims, approaches, theories, and perceived factors influencing successful reading instruction. Responses were categorized ad hoc. Pertaining to approach description, teachers more frequently described use of a mixture of methods to suit children's individual needs. Indirect, rather than direct, child-centered approaches that would encourage positive affective student responses were favored by the teachers. On the other hand, head teachers and language coordinators emphasized more general views of reading curriculum. Four possible sources for the dominant views expressed included (1) the currently influential theories of how reading ability is acquired, (2) the perceived demands of various responsibilities given to classroom teachers, (3) an aversion to the concept of direct teaching, or (4) a lack of clarity on how reading can be taught.

SIPPOLA, ARNE E. (1994). Literacy education in kindergarten classrooms. *Reading Horizons, 35*(1), 52–61.

Describes three different approaches to literacy development observed by the author in 37 Washington state kindergarten classrooms over 8 years. One group of teachers (approximately 20%) was labeled "maturationist" and described as continuing to rely on the traditional conception of reading readiness. Maturationists tended to avoid reading-specific activities and offered instead social, cognitive, and linguistic activities typically organized into learning centers. Children in those classes participated in traditional readiness exercises such as discriminating geometric forms and environmental sounds. The second group (approximately 55%) used commercial basal materials and practiced a subskill orientation to the teaching of reading. In addition to more traditional reading readiness activities, these children completed exercises on letter identification, phoneme discrimination, sound-symbol associations, rhyming, and recognition of sight words. The author notes that some recent basals deviate from these patterns to incorporate shared reading activities and writing. The third program pattern (approximately 25% of the sample) held an emergent literacy perspective on literacy development. Their classrooms included learning centers for writing, listening, and drawing, as well as book collections and letter-word games. The children participated in shared reading activities, and features and concepts of print were pointed out to them. The author noted that emergent literacy classrooms reflected contemporary knowledge about literacy acquisition.

TRUSCOTT, DIANE M., & RICKEY, MELISSA J. (1994). Multicultural/multiethnic children's literature: Familiarity, availability, and use in classrooms and libraries. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 190–199). Chicago, IL: National Reading Conference.

Reports on elementary teachers' familiarity with and use of multicultural/multiethnic literature in literacy instruction and factors that inhibit or facilitate the use of that literature. The survey comprised 100 multicultural/multiethnic titles randomly selected from elementary-level books available ($n = 436$) and representing the 5 most populous minority groups in the U.S.: Native American, African American, Asian American, Hispanic, and Jewish American. For each title, subjects indicated whether they were familiar with the title and whether they used it for

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classroom instruction, used it as a read aloud, or recommended it to students for pleasure reading. The survey was distributed to 5 urban and rural elementary schools, 1 elementary school on an Indian reservation, and 24 district libraries. Respondents totaled 78 teachers (72% response rate) and 12 librarians. Descriptive statistics were calculated using two separate data sets (teacher, librarian) for group totals and by individual categories. Ranking of specific titles by category according to availability and use were provided in post-hoc analysis. Overall, teachers were unfamiliar with 88% of the titles. Of those titles recognized, teachers were most aware of Native American titles (15%) and African American titles (14%). Approximately two thirds of the titles teachers were familiar with were not used in the classrooms. The majority of the titles also were not part of school listings. Factors influencing familiarity and use are discussed, including conceptions of the purpose of multicultural/multiethnic literature, availability of titles in school libraries and in the general market, and title visibility.

ALLEN, VIRGINIA GARIBALDI; FREEMAN, EVELYN B.; LEHMAN, BARBARA A.; & SCHARER, PATRICIA L. (1995). *Amos and Boris*: A window on teachers' thinking about the use of literature in their classrooms. *The Reading Teacher*, *48*, 384–390.

Seeks insights into teachers' decisions regarding the use of literature with children, teachers' literary understandings, and teachers' beliefs about what is important in a picture storybook. Nineteen teachers who had expressed their willingness to be interviewed were selected in a stratified random sample from a larger pool of teachers who had completed a statewide survey on the use of literature. The sample represented individuals with varying years of teaching experience; many different grade levels; and rural, urban, small city, and suburban locales. Each subject was interviewed individually and asked to read *Amos and Boris* and respond in writing to three questions eliciting their ideas about the use of the book with children. Teachers' responses were summarized, and as appropriate, similar responses were tallied. Results confirmed that all subjects expressed strong interest in using literature to develop literacy skills and to enrich the total curriculum. The framework for making instructional decisions seemed similar to approaches typically used in basal readers (e.g., identifying the main idea and gaining specific information). The questions teachers suggested asking were high-level ones, and the proposed activities appeared appealing for children and appropriate for making links across the curriculum. The teachers gave very little instructional focus to the literary aspects of the book. They indicated limited suggestions regarding the vocabulary and offered no instructional attention to the author's unique qualities as a writer and illustrator.

LEHMAN, BARBARA A.; FREEMAN, EVELYN B.; & ALLEN, VIRGINIA G. (1994). Children's literature and literacy instruction: "Literature-based" elementary teachers' belief and practices. *Reading Horizons*, *35*(1), 3–29.

Investigates the relationship between teacher perceptions and practices in literature-based reading instruction. In Phase I, 192 elementary teachers completed a questionnaire by indicating the degree of their agreement with stated beliefs and instructional practices related to the use of children's literature. Responses indicated consistent beliefs in several areas: 73% agreed or strongly agreed that teachers should develop their own literature programs; 94% agreed or strongly agreed that children's literature should be the primary component of the reading/language arts program; and 92% agreed or strongly agreed that children should be taught to use critical thinking skills as they read books. Characteristics of the respondents (teaching location, experience, grade level) were used as variables in computing analysis of variance for questionnaire items. More experienced teachers felt it more important to read widely rather than to engage in an in-depth study of one book. Teachers in rural schools felt book lists were more important than their urban and suburban colleagues did. A canonical discriminant analysis, computed to determine the congruence between teacher beliefs and

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practices, indicated that the measured beliefs could predict the use of 6 (of 12) teaching practices. These included beliefs related to teacher- versus child-centered instruction, materials used for planning and instruction, and use of conferences in assessment. In Phase 2, a stratified random sample of 10 teachers was interviewed to probe their knowledge of children's literature, the basis for their instructional decisions, and their methods of assessment. The teachers held varying interpretations of literature-based instruction. Their views on assessment reflected a skills/comprehension orientation rather than a literary focus. Although the 10 teachers were highly experienced, most were still in a period of transition with using literature in their teaching.

RUCINSKI, CINDI A., & GARCIA, GEORGIA E. (1994). Teachers' concerns about curriculum change: Adapting to the "reading workshop." In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 537–542). Chicago, IL: National Reading Conference.

Focuses on understanding the initial concerns of teachers as they began to consider and make changes in their reading instruction, moving from a basal reader approach to a reading workshop approach. Six teachers from two elementary schools in the same district worked collaboratively with a university professor to link their professional experience with current educational research. The group of teachers met with the professors for 2 hours every 2 weeks to report changes made in their class as well as to share questions and concerns. In addition, each teacher was observed at three different times throughout the semester. Data from field notes and group meetings were examined for patterns related to teachers' concerns and then coded. Many of the concerns expressed and the nature in which they developed reflected the Concerns-Based Adoption Model (CBAM), which includes three dimensions: self-concern, task concerns, and impact concerns. However, others were not represented in the CBAM model, including concerns about support, providing information, and maintaining the innovation.

KONOPAK, BONNIE C., & WILLIAMS, NANCY L. (1994). Elementary teachers' beliefs and decisions about vocabulary learning and instruction. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 485–495). Chicago, IL: National Reading Conference.

Surveys a group of teachers across grade levels, content areas, and student specializations at one elementary school on their beliefs and choices about vocabulary acquisition and instruction. Subjects were 50 teachers and 1 principal from a public elementary school in the southeastern United States. Five instruments were used to examine participants' orientations toward vocabulary learning and instruction. Two sets of belief statements and two sets of instructional scenarios were constructed to assess three vocabulary hypotheses; the fifth measure was an open-response instrument for participants' lesson descriptions. Overall, participants were able to select a knowledge orientation regarding their beliefs about teaching and learning; however, only two-thirds of the teachers indicated a similar orientation in their own lesson plans. It appeared that with forced-choice tasks teachers are able to see the relationship between theory and the ideal application, but, when asked about their typical teaching situations, they are influenced by other factors such as controlled curriculum.

CAMPBELL, ROBIN. (1994, September). The teacher response to children's miscues of substitution. *Journal of Research in Reading, 17*, 147–154.

Explores teacher response to substitution miscues of two 6-year-old beginning readers in England over 1 academic year. Teacher responses were categorized into five types: word cueing, providing the word, non-response, negative feedback (the use of the word "no" to indicate miscue inappropriateness), and phonic analysis. Data indicate a relation between mis-

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cue type and teacher feedback. When syntactic and semantic acceptability were not apparent, negative feedback was frequent. Words were supplied more often for the less proficient reader than for the proficient and when the miscue was the first word in the sentence or was needed for the flow of the text. Cueing responses were given in a variety of contexts, but phonic analysis was rarely encouraged. Whether teacher response was effective was tested immediately after the response and when the word was next met in the text. Providing the word was the most effective strategy for the immediate response but was least effective for future encounters, and other responses were not as effective immediately but were more helpful when the miscued word was next met by the child. Most effective was restarting the sentence for the pupil; this procedure immediately aided the child in repairing the miscue and also had a continuing positive effect the next time the word was encountered.

LLOYD, CAROL V., & ANDERS, PATRICIA L. (1994). Research-based practices as the content of staff development. In Virginia Richardson (Ed.), *Teacher change and the staff development process: A case in reading instruction* (pp. 68–89). New York: Teachers College Press.

Identifies research-based practices in teaching comprehension and describes reactions of teachers in an inservice program attempting to implement the practices. The authors first examined research-based comprehension practices that had been used in the intermediate elementary grades. Identified were 89 practices in 15 major categories of reading comprehension teaching practices. A sampling of the research-based practices in the following categories are discussed briefly: background knowledge, imagery, self-monitoring/metacognitive, questioning, vocabulary, and text characteristics. The staff development program included individual and group components. In the individual component, an interview with each teacher was conducted based on a videotape of the teacher's reading comprehension instruction. Videotapes and interviews were done at the beginning and at the end of the staff development process. Teachers were provided with a list of the research-based practices along with a brief description of some of the practices. They were to read the list and come to a group session prepared to discuss the practices they wanted to learn. However, teachers did not refer to the list during any of the staff development sessions. Three barriers were found relative to teachers' not using the practices: (1) the practices were decontextualized, (2) the theoretical stance of the literature differed from teachers' theoretical stances, and (3) teachers' concerns differed from those addressed by the staff development goals. Discussed are some of the problems with the research that make it difficult to connect research and practice.

ROGERS, THERESA, & MCLEAN, MARI M. (1994, September). A critical view of urban literacy: A case study of successful high school English teachers. *Urban Review*, *26*, 173–185.

Focuses on the characteristics of three white female high school English teachers who had been identified as successful teachers of disadvantaged high school students by their administrators and colleagues. Primary data collection occurred over 1 academic year and included the following: structured and incidental interviews with the three teachers, loosely structured individual interviews, and individual teacher journals and autobiographies. Classroom observations, interviews with principals and student and parent volunteers, student demographics, and student writing samples were used to triangulate with the primary information. Data were analyzed by means of a critical-interpretavist frame in which teachers participated in the creation and confirmation of descriptive themes. Among the findings were the following: (1) the teachers engaged students in literacy practices that were innovative and meaningful for the students; (2) they were reflective about their practice and adjusted it to meet students' needs; (3) they displayed personal qualities associated with successful teach-

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ing of at-risk students in that they were trusting of students, treated them with respect, gave them a voice in the classroom, and were nonjudgmental about, considerate of, and honest with them; (4) they worked hard to build a sense of community among students and themselves; and (5) they exhibited a commitment to urban education.

REUTZEL, D. RAY; SUDWEEKS, RICHARD; & HOLLINGSWORTH, PAUL M. (1994–95, Winter). Issues in reading instruction: The views and information sources of state-level textbook adoption committee members. *Reading Research and Instruction, 34*, 149–171.

Surveys the members of 13 state-level adoption committees ($n = 141$) to determine their perceptions of current issues in elementary reading instruction and their information sources. The survey instrument consisted of 10 issues related to contemporary practice derived from a review of current journals. State-level adoption committee members reported four major unresolved reading issues: (1) the assessment of students' reading progress; (2) the whole language versus basal approaches; (3) the use of ability grouping for reading instruction; and (4) the use of trade books in place of basals. The most frequently consulted reading information sources used by state-level textbook adoption committee members within the past 12 months included magazines, newspaper and newsletter articles, TV and radio broadcasts, and personal contacts with reading experts. The authors conclude that state-level textbook adoption committee members are aware of the important reading issues of the day, but that they may lack sufficient specific knowledge of the issues or feel legally constrained by current policies, politics, and economics of basal reading adoption to significantly affect any changes or innovations in reading education.

RICHARDS, JANET C.; GIPE, JOAN P.; & MOORE, RAMONA C. (1995, Spring). Sociocultural factors: How context influences preservice teachers and university supervisors in an urban field placement. *Journal of Reading Education, 20*, 64–68.

Examines the sociocultural factors of one urban elementary school and discusses how those contextual aspects affect university participants over 3 years. Data sources were formal and informal observations, interviews, field notes, informal conversations, dialogue journal entries, pre- and postsemester written metaphors about teaching, interpretations of a series of seven researcher-devised reading/language arts illustrations, and postsemester reflective statements. Using constant comparative methods, the researchers identified recurring patterns or themes. Findings indicated that preservice teachers entered the program with feelings of apprehension. After their initial teaching experiences, those feelings escalated. Eventually, the preservice teachers settled in and became more aware of students' needs; however, because the teaching context was difficult, many teachers became preoccupied with management concerns and some viewed their students as adversaries. Over the semester, the teachers gradually constructed a good understanding of effective literacy practices and developed confidence in their abilities to teach multicultural, urban students.

JACKSON, FRANCESINA R., & CUNNINGHAM, JAMES W. (1994, Winter). Investigating secondary content teachers' and preservice teachers' conceptions of study strategy instruction. *Reading Research and Instruction, 34*, 111–135.

Examines secondary content teachers' conceptions of study strategy instruction across four different stages of professional training and experience and across four major discipline areas (math, social studies, science, and English). One hundred four subjects at different stages of professional development (secondary students at the beginning and end of a content reading course, students at the end of student teaching, as well as experienced teachers) completed an open-ended questionnaire. The questionnaire was designed to elicit unprompted re-

sponses of the teachers' conceptions of the kind of study strategies secondary students need, whose responsibility it is to teach those skills or strategies, descriptions of methodologies for teaching study skills, and the respondents' confidence in secondary students' application of those skills. Analyses of subjects' responses revealed a lack of knowledge and a lack of valuing of study strategies. Altogether, the subjects mentioned 22 different strategies averaging 2.84 per subject. The 5 most frequently cited strategies were active, purposeful reading, identifying important information, notetaking, managing time, and critical listening, reading, and thinking. Although the teachers agreed on the importance of teaching study skills, they were twice as likely to assign responsibility to the family than to content area teachers. Subjects, especially preservice teachers, often confused teaching and learning content with teaching and learning how to study content.

CORNELIUS, GEORGIANA. (1995, Spring). Literacy practices of the early childhood educator. *New Mexico Journal of Reading*, *15*(3), 53–57.

Identifies and examines the reading readiness practices of 72 Wisconsin nursery, kindergarten, and special education teachers. All subjects completed a 50-item questionnaire, the Early Childhood Readiness Tasks, requiring use of a 5-point Likert scale to rate the frequency of their use of 10 literacy instructional practices. Data analysis included descriptive analysis, confirmatory factor analysis, and Pearson product correlation coefficients. Results showed that 48% of the sample provided children with a variety of print activities; however, 39% reported that they rarely or never provided students with letters, words, or sentences. At least 57% of the teachers provided a variety of oral language activities, but 53% reported they did not have time to observe and document children's language. Forty-seven percent indicated they rarely provided opportunities for dramatic play. Although use of prediction was a regularly reported practice, 30% of the teachers indicated they rarely or never encouraged prediction while students read. Approximately 29% of the respondents indicated they rarely or never provided time for silent reading. At least 50% indicated they regularly encouraged children to read for pleasure, although 40% reported they rarely or never read for enjoyment themselves. Age and years of experience correlated positively with the frequency of literacy practices.

COSGROVE, MARYELLEN S. (1995, Spring). Project SPILL: Student partners in literacy learning. *Journal of Reading Education*, *20*, 60–64.

Analyzes the reflective journal entries of Georgia preservice teachers to determine their awareness of the cultural differences within their assigned classrooms as well as their ability to select appropriate instructional strategies. The student teachers' journals were divided into two sections that included objective accounts and critical analysis of a tutoring experience. Each section was read and its entries categorized by the researcher, using the constant comparison method. Results supported the contention that all preservice teachers changed from an early emphasis on the child to emphasis on instructional methods and, ultimately, toward connecting their own teaching with the child's learning. The preservice teachers appeared to grow in reflective decision making and in awareness of cultural and dialect differences. Journal comments indicated that awareness of their students' culture and dialect led teachers to select more appropriate strategies and materials, as well as to reinterpret their students' knowledge and reading performance.

II–2 Beliefs and attitudes toward reading

CHEEK, DALLAS H.; RUPLEY, WILLIAM H.; & WILSON, VICTOR L. (1995). Analysis of the relationship between political attitudes and theoretical orientation to reading. *Balanced Reading Instruction*, *2*, 44–55.

Investigates the relation between theoretical orientation to reading and political attitudes among public school administrators, teachers, and university professors. The sample was a stratified national sample using United States census regions as the primary level. Elementary school principals ($n = 45$), teachers of grades 1 through 5 ($n = 45$), and university professors of elementary reading methods ($n = 45$) were randomly selected from 9 states. Data were obtained using a researcher-designed survey of 14 items constructed to determine the subjects' theoretical orientations to reading (phonics vs. whole language), their political attitudes (conservative vs. liberal), and their interpretations of the political attitudes of their local boards of education. Ten survey statements regarding reading instruction were drawn from the Theoretical Orientation to Reading Profile (TORP). A high aggregate score for these statements was indicative of a phonics orientation; a low score was indicative of a whole language orientation. Two items focused on political attitudes, with high scores indicative of a conservative stance and low scores indicative of a liberal attitude. The remaining two items required subjects to indicate their theoretical orientations to reading on a whole language–phonics continuum. Analyses of the data involved correlation procedures and ANOVA tests. The results revealed significant positive coefficients of correlation for all three groups between their theoretical orientations to reading and political attitudes, and significant differences in theoretical orientations and political attitudes between university professors and other subjects. A phonics orientation to reading was associated with a more conservative political attitude. Principals and teachers indicated a phonics orientation to reading; university professors oriented more toward whole language. University professors were more politically liberal than either teachers or principals. School boards were found to have a phonics orientation to reading and a conservative political attitude. In addition, a significant positive coefficient was found between the political attitudes of school boards and the theoretical orientation to reading of the elementary school reading programs in the boards' districts.

RICHARDSON, VIRGINIA. (1994). The consideration of teachers' beliefs. In Virginia Richardson (Ed.), *Teacher change and the staff development process: A case in reading instruction* (pp. 90–108). New York: Teachers College Press.

Studies the relationship between teachers' beliefs and their practices in reading comprehension. Interviews were conducted with 39 grade 4, 5, and 6 teachers in 5 schools. Additional data included observations of each teacher's comprehension instruction and videotapes of a subset of the teachers. Teacher interviews were analyzed and predictions made about specific aspects of each teacher's reading comprehension instruction. Each teacher was placed in 1 of 4 quadrants based on the interview. The quadrants ranged from a word-and-skills approach to a constructivist concept of reading. Observations were than analyzed using the same categories to describe the instructional practices. The findings indicated a strong relation between practices and beliefs. Implications for staff development programs are discussed.

WHAM, MARY ANN. (1993, Fall). The relationship between undergraduate course work and beliefs about reading instruction. *Journal of Research and Development in Education, 27*, 9–17.

Examines preservice teachers' theoretical orientations to reading and explores the relation of undergraduate course work and student teaching experiences to these orientations. Subjects included 35 elementary majors (33 females, 2 males) in a large, midwestern university's teacher education program. The students participated in 2 semesters of reading course work during the junior year and student teaching in the first semester of the senior year. Theoretical orientations to reading were assessed using the Theoretical Orientation to Reading Profile (TORP), which was administered to all students and their cooperating teachers. Students completed the TORP 3 times: prior to their first reading course, after their second reading

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course, and during the final weeks of student teaching. Cooperating teachers completed the TORP once. To explore the consistency between the TORP results and teaching behaviors of the cooperating teachers, 6 were videotaped teaching reading. The tapes were analyzed by 3 raters who were 100% in agreement with the reported orientations of 4 of the teachers. For the remaining 2 teachers, the evaluators were 66% in agreement. Data resulting from administrations of the TORP were analyzed using descriptive statistics, including percentages and measures of central tendency. Results revealed a decrease in the percentage of phonics-oriented students (23%–3%–0%) over time, an increase in the percentage of skills-oriented students (77%–86%–91%), and an initial increase in the percentage of whole language students (0%–11%–9%). The results of the cooperating teachers' TORP scores indicated that 89% of the teachers held a skills orientation to reading. The results indicated that more than half of the students in the study experienced no changes in theoretical orientation to reading throughout the course of the study and, for those who did experience a change, the course work appeared to have had a greater influence than did the student teaching experience.

ROSKOS, KATHLEEN, & WALKER, BARBARA. (1994). An analysis of preservice teachers' pedagogical concepts in the teaching of problem readers. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 418–428). Chicago, IL: National Reading Conference.

Pilots analytic techniques for examining novice teachers' pedagogical concepts as reflected by their instructional choices and reasoning in their attempts to teach problem readers. Drawing on a database from an earlier study, 36 responses to problem-reader case studies were randomly selected. Authors were preservice teachers in their junior year participating in a reading diagnosis course. Students responded to each case study upon entering (n = 18) and exiting (n = 18) the course. The 36 protocols were examined for the meaning networks constructed around two fundamental semantic relationships: means-end statements and statements of rationale. A total of 363 means-end statements were identified in the sample representing three broad categories: affective, generic, and specific. A total of 158 rationale statements were located, providing the basis for the construction of three types of causal chains (single, multiple, and complex). The complexity of understanding how novice teachers develop pedagogical ideas and the potential of the analytical techniques used in this study are discussed.

DAVINROY, KATHRYN H., & HIEBERT, ELFRIEDA. (1994). An examination of teachers' thinking about assessment of expository text. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 60–71). Chicago, IL: National Reading Conference.

Reports on the thinking of five third-grade teachers regarding their use of expository text in instruction and assessment. The project was part of a larger staff development effort that involved implementing performance assessments in reading and mathematics and included an initial focus on activities with narrative text. Three schools were selected to participate in the larger project and were treated individually, thus allowing a case study approach. Weekly workshops with school teams alternated between literacy and mathematics subject areas. These sessions were audiotaped and transcribed. Additional data sources included field notes recording nonverbal communications during the nine spring workshops, classroom artifacts, and end-of-year interviews with teachers. The final coding system used in analyzing the data consisted of four primary categories: definitions, purposes for learning and teaching, teaching strategies, and assessment strategies. Teachers indicated that expository text experiences and instruction of strategies had not been a focus of their reading programs beyond report writing. Teachers began to explore different types of text and responses in their classrooms as well as alternative activities to

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assess comprehension of expository text other than written summaries. Summarizing evolved into an instructional form rather than an assessment tool and emerged in a variety of forms such as letter writing, group discussions, and making connections among texts.

FOX, DANA. (1994). What is literature? Two preservice teachers' conceptions of literature and the teaching of literature. In Charles K. Kinzer & Donald J. Leu (Eds), *Multidimensional aspects of literacy research, theory, and practice* (pp. 394–406). Chicago, IL: National Reading Conference.

Examines preservice teachers' attitudes and beliefs about literature and the teaching of literature before and after formal teacher education course work. Two case studies, from a sample of 24 students enrolled in a teaching literature course, are presented. The two cases were selected because of contrasts between their responses to the course work. Data collection included in-depth, semistructured interviews, participation observation in each of the 15 weekly class meetings, written artifacts (logs, assignments, course documents), and the researcher's reflective log. The majority of teacher candidates reported that the course offered them a concrete model for teaching literature in secondary schools even though they may be uncomfortable with particular components of that model.

BEAN, THOMAS W. (1994). A constructivist view of preservice teachers' attitudes toward reading through case study analysis of autobiographies. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 370–379). Chicago, IL: National Reading Conference.

Describes preservice teachers' attitudes toward reading through detailed case study analysis of their reading autobiographies. Secondary education students representing mathematics (n = 10), science (n = 12), and social studies (n = 12) content areas were subjects in the study. In a required content area reading class, students were asked to consider their reading experiences from their earliest memory through to the present (reading autobiography assignment). In doing so, students commented on what they read, feelings associated with their recalled reading events, and how these experiences might influence them as content area teachers. The autobiographies were coded for positive or negative attitude statements and analyzed for influences or events that might explain a dominant view. The majority (67%) had a positive view of reading. Overall, attitudes toward reading changed for individuals at later stages of their recalled reading development. At the early and middle stages, parents were the most often mentioned influence, whereas teachers (particularly English teachers) played a positive role at middle and later stages. The two most frequently mentioned materials used in early reading were Dr. Suess books and basal series. Recreational reading was often suppressed during later adult years to cope with large amounts of assigned textbook reading. The library and bookstore served as primary sources of books. Many students claimed that they would encourage students' reading as teachers, even though they often had a dated repertoire of adolescent literature, thus suggesting that content area methods courses need to expand future teachers' understanding of trade books and strategies.

EVANS, KAREN S. (1994). Group dialogue journals as a means of exploring preservice teachers' beliefs about content-area literacy. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 112–119). Chicago, IL: National Reading Conference.

Describes how a group of preservice secondary teachers participated in and changed their beliefs about content area literacy. Students were 23 secondary education majors enrolled in a required content area literacy course during a 5-week summer session. Students were divided in 5 journal groups and wrote 1 day a week on ideas and concerns about presented top-

ics. Each entry was exchanged with another member in the group and responded to in writing. Domain analysis procedures were used to examine the journal entries. Analysis resulted in the following categories: concerns and questions, course structure, societal issues, theory, critical theory, teaching beliefs, application, instructional practices, change, and value of the course. Results suggested that it is important to address students' skepticism and use it to open dialogue that explores broader social and political issues underlying students' misconceptions. Group dialogue journals appeared to have potential as a means of helping students confront their initial and changing conceptualizations.

KONOPAK, BONNIE C.; WILSON, ELIZABETH K.; & READENCE, JOHN E. (1994). Examining teachers' beliefs, decisions, and practices about content-area reading in secondary social studies. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 127–136). Chicago, IL: National Reading Conference.

Surveys secondary social studies teachers' beliefs of content area literacy and their classroom practices, and presents a case study of an inservice teacher's plans and actions during classroom instruction. Participants were 35 secondary teachers enrolled in different graduate education courses. Teachers ranged in years of experience (1–15) with social studies as their primary teaching area. Four paper and pencil instruments that focused on reading in the content areas were administered during the first week of class: (1) a set of 15 belief statements on the learning process, (2) a set of 15 belief statements about content area literacy instruction, (3) a set of 3 lesson plans on vocabulary instruction (application), and (4) a set of 3 lesson plans on comprehension (application). Descriptive statistics were calculated to determine the frequency and percentages of orientations. Chi-square statistics were computed to examine the extent of match between teachers' beliefs about reading and their instructional choices. Results indicated that teachers favor reader-based explanations of the reading process but are not always consistent in the beliefs they espouse and the instruction they demonstrate. Survey results were extended and supported by examining a secondary teacher's instruction during a social studies unit.

MOJE, ELIZABETH B. (1994). Life experiences and teacher knowledge: How a content teacher decides to use literacy strategies. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 153–161). Chicago, IL: National Reading Conference.

Asks what personal and professional life experiences have contributed to one teacher's beliefs about science and science teaching and how these experiences influence the teacher's decisions about content literacy strategies. Reports on a portion of an ethnography that investigated the ways in which literacy was embedded in and shaped one high school science classroom. The participant was a veteran teacher of 16 years who taught chemistry and mathematics at a high school in a U.S. midwestern town. Data were collected over 18 months and included 7 formal, semistructured interviews, daily informal interactions, field note observations, and audio- and videotape transcriptions of daily lessons. Personal and professional experiences and values that have influenced this teacher's beliefs and decisions about science, science teaching, and using literacy activities are described by the theme "doing what's right." This educator's beliefs and philosophies developed from life experiences that emphasized the value of caring, respect, and organization.

WRAY, DAVID, & MEDWELL, JANE. (1994, November). Student teachers and teaching reading. *Reading*, *28*, 43–45.

Investigates the knowledge and beliefs about reading and teaching reading held by students in a one-year postgraduate teacher education course in southwest England. Specifically,

the researchers attempted to determine what 172 student teachers knew and believed about reading and the teaching of reading at the beginning of their teacher education experience, how their knowledge and beliefs changed during the course, and the factors the students identified as change agents. A questionnaire was administered to the whole sample during the first week of the course, during the final week of the first term (before the first substantial teaching experience), and during the final week of the course (following the final teaching experience). A subsample of 12 students was interviewed prior to each administration of the questionnaire. Results showed significant changes in teachers' beliefs about the teaching of reading; they reflected more consistency in their views at the end of the course. There was little evidence of a universal swing toward one particular view, such as toward a whole language orientation. The students generally appeared to feel less competent at the end of the course than they had at the beginning in terms of the number of things they felt able to do.

OLSON, JAMES R., & SINGER, MARTI. (1994–95, Winter). Examining teacher beliefs, reflective change, and the teaching of reading. *Reading Research and Instruction, 34*, 97–110.

Presents a framework for an approach to formative assessment of teaching that engages the beliefs and goals of teachers and produces a model for outside validation of an individual teacher's reflective profile. Twenty volunteer secondary reading teachers completed self-report inventories about their theoretical orientation, conceptual framework, belief system, and the teaching of reading. In addition, two teachers were asked to write personal histories that recorded their experiences as teachers and as learners. All classrooms were observed at least 3 times during a 2-month period to obtain anecdotal records of instruction. A researcher-designed observation instrument was used consisting of categories coinciding with those in the teacher inventories. Students of these teachers also completed an inventory of their perceptions of classroom instruction. Teacher profiles were developed to serve as a means of self-evaluation by assessing instruction and investigating attitudes and belief formation. Although no clear categories for theoretical orientation, conceptual framework, or belief system emerged by scoring the inventories, teacher beliefs reported on the individual instruments appeared to match practice. Further, this research suggests that clarifying beliefs may force teachers to reexamine what they do and why they do it.

GUIMÃRAES, ANA SOFIA, & YOUNGMAN, MICHAEL. (1995, February). Portuguese preschool teachers' beliefs about early literacy development. *Journal of Research in Reading, 18*, 39–52.

Reports results of a questionnaire survey conducted in a central Portuguese county to ascertain preschool teachers' opinions of the role of preschool in children's literacy development. Further, the survey was intended to investigate the skills and knowledge teachers viewed as important for early reading and writing development. Results showed that, overall, the 129 teachers (97%) who completed the survey regarded preschool education as important for future literacy acquisition, but the majority did not think that early literacy activities should always be part of the preschool curriculum. A majority (66%) thought literacy activities could be part of the preschool curriculum only if children are already starting to read and write. Seventy percent felt that reading and writing should be introduced simultaneously. When teachers rated the importance of a list of 15 skills and concepts associated with written language knowledge, they assigned importance to verbal skills (including correct pronunciation of words), perceptual skills (auditory and visual), and fine motor skills. Letter-sound knowledge and phonological awareness were considered least important. Literacy behaviors that teachers reported observing most frequently were understanding of book orientation and experimenting with the layout of shapes that approximate writing.

DiPillo, Mary Lou, & Leone, Susan. (1994, Fall). How does one read and how does reading ability develop? Perceptions of college students in their initial reading course work. *Journal of Reading Education, 20,* 44–52.

Ascertains preservice teachers' beliefs about reading process skills and how those skills develop. Subjects were 128 students enrolled in 2 midwestern U.S. universities. The majority of students had attended elementary school when the basal was the most commonly used vehicle for reading instruction. A 2-part survey was administered to the students. Part 1 assessed students' perceptions of how children read. Part 2 assessed perceptions of how reading ability develops. In most cases, response data reflected students' preference for a holistic approach as opposed to one that focuses on specific skills. Also a reader-based comprehension framework was preferred more often than a textbook-based framework.

II–3 Preservice and inservice preparation

Phelps, Stephen, & Weidler, Sarah D. (1993, Fall). Preservice teachers' perceptions of effective teaching. *Journal of Reading Education, 19,* 26–30.

Examines the effect of a field-based reading methods course on preservice teachers' perceptions of effective and ineffective lessons. At the beginning and end of the semester, 84 college juniors, enrolled in four sections of the reading/language arts field-based course, viewed a videotaped lesson taught by a graduate student completing a master's degree reading certification program. The teacher was working with a small group of fifth and sixth graders who were attending a summer reading clinic. Undergraduates were to write aspects of the lesson they considered positive, negative, or about which they wanted more information. Responses were analyzed against a checklist based on a set of teaching strategies drawn from teacher effectiveness research supplemented by strategies demonstrated in the video lesson and items based on subjects' responses. A chi-square comparison was computed for the pre- and postratings of each teaching strategy. At the beginning of the class, students appeared to take a teacher-centered view of instruction. They were interested in how the teacher related to students, how the lesson was kept moving, and some of the specific teaching techniques employed. At the end of the semester, students saw teaching as effective when children were taking part in making decisions and exploring ideas. Subjects were more critical of the degree to which the teacher coached and manipulated the children and were more aware that there was little involvement of students in the lesson.

Dynak, Janet, & Smith, Mary Jo. (1994). Summarization: Preservice teachers' abilities and instructional views. In Charles K. Kinzer and Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 387–393). Chicago, IL: National Reading Conference.

Explores the use of summarization as a strategy to improve preservice teachers' ability to construct a written summary of text and examines whether the use of modeling and guided practice would alter the preservice teachers' views about their roles in teaching summarization to high school students. One hundred thirty-two undergraduate students enrolled in a secondary education content-reading methods course participated in the study over the course of a semester. Data were collected through the use of a pre- and a posttest in which students read and summarized a course-related article and responded to how they would teach students in a high school class to read and summarize written material. Throughout the semester, students observed the technique being modeled by the instructor and applied the strategy in multiple instances. Pre- and posttests were holistically scored for summarizing ability and compared. Comparisons revealed an improvement in ability to summarize on the posttest, sup-

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porting the need for strategy instruction of difficult text at the university level. However, students did not specify the steps of modeling and guided practice as a technique for teaching the skill of summarization to high school students.

SEABORG, MARY BETH; MOHR, KATHLEEN; & FOWLER, TERI JO. (1994). Preservice teachers' learning processes: A descriptive analysis of the impact of varied experiences with portfolios. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 440–447). Chicago, IL: National Reading Conference.

Examines results of three experiences of preservice teachers in learning about portfolio assessment. Fifty-one undergraduate preservice students from two sections of a reading comprehension class and a reading practicum class participated in the study. Subjects participated in one of three different approaches to learning about portfolio assessment: (1) moderate involvement by students (lecture and classroom activities that focused on portfolio assessment), (2) active involvement and practice by students but no feedback (classroom activities and the development of a personal portfolio), and (3) active involvement and practice by students with feedback from a knowledgeable source (classroom activities, personal portfolio, and feedback). Pre- and postsurveys (15 items) focused on students' knowledge about theory, content, and implementation of portfolios. Survey responses were rated on a 5-point scale from extremely knowledgeable to no attempt to answer. Findings indicated that the students in all three groups were able to learn about portfolio assessment, suggesting that information can be gained in a variety of ways. The students who experienced more activities (group 3) were able to fully understand the process and goals of implementation better.

STANSELL, JOHN C. (1994). Reflection, resistance, and research among preservice teachers studying their literacy histories: Lessons for literacy teacher education. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 448–458). Chicago, IL: National Reading Conference.

Assesses the impact of students' researching their own literacy histories on their views of literacy and literacy learning and how this influences how they see themselves as teachers and researchers. The informants were 100 students enrolled in four sections of a senior-level reading course. Data sources included student and group interviews, written histories (drafts and final versions), and member checks. Early indications of resistance and students' uneasiness with the task were expressed through numerous and frequent "how" questions. Students also expressed concern about a lack of data (they have nothing to remember) or a lack of access to data (they cannot remember). Findings are discussed relative to the identification and development of the theme resistance. Implications for literacy teacher education stress the importance of students' conceptions of research and the context of research assignments, acknowledgment of teachers' shortcomings as researchers, and viewing research as a pervasive feature of programs for preservice teachers.

OWEN, PAM. (1994). A training profile for teaching reading: The student teacher's reading record. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 152–160). Cheshire, England: United Kingdom Reading Association.

Describes two methods of assessing the quality of courses designed to teach reading and outlines the use of these data in developing a training profile. A random sample of 50 students, each from 3-year course sequence in teacher education, completed a questionnaire about how well prepared they felt they were to teach reading. Little difference between responses of second- and third-year students was found; however, by the fourth year, 89% of stu-

dents felt confident in their abilities to teach reading. Students reported that courses cover the technical aspects of reading in less depth than those aspects that focus on attitudinal elements. A second assessment device, literacy audit, was conducted over 3 months and involved content analysis of materials and texts, interviews with students, and structured observations of course sessions. Results of the evaluations suggested that improving the quality of the course was not primarily a function of changing course content but that it required establishing a curriculum framework and coherence.

MOSENTHAL, JAMES. (1994). Constructing knowledge and expertise in literacy teaching: Portfolios in undergraduate teacher education. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 407–417). Chicago, IL: National Reading Conference.

Describes a case study of one student's responses to and construction of a portfolio in a restructured undergraduate teacher education course. The case study was selected because this portfolio illustrates the centrality of the student's motivation in teaching and learning based on her own work with an individual child. Students constructed portfolios at the end of the semester and participated in four assignments: interview, teaching logs, literacy folios, and lesson planning. Three types of interactions scaffolded the development of the portfolios (campus, field, conference). Results indicate that two agendas (teacher vs. student) create a tension between construction and mastery. The portfolios serve as a possible tool to give equal status to the agenda of learners in their experience of the course or program of instruction.

ANDERSON, REBECCA S., & REID, SUZANNE. (1994). A collaborative conversation about learning: Using dialogue journals for professional development. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 361–369). Chicago, IL: National Reading Conference.

Explores the use of dialogue journals as a means of enabling the college instructor to make changes in her teaching. The elective undergraduate course met twice a week for 3 hours and focused on teaching problem readers and writers. During the semester, the two participants (the course instructor and a participant observer) exchanged dialogue journals twice a week after each class session. The entries described perceived important classroom events and their implications. Ten class segments were videotaped, students interviewed twice, and after-class conferences video- or audiotaped 5 times. Analysis focused on the nature of the journals (content, structure, language, and inclusiveness) and on issues surrounding the experience (time and balance of power). Implications for the value of dialogue journals for professional development are provided.

ALLEN, DIANE D. (1995, Spring). Children's literature in an undergraduate reading course: Learning from student responses. *Journal of Reading Education*, *20*, 44–46.

Reports results of an investigation of university students' responses to a piece of children's literature as a way of understanding the use of response to teach specific content in a methods class. Fifty-two preservice teachers enrolled in two sections of an undergraduate reading assessment course were asked to respond to the reading of a children's novel. Because both the book and the course focused on the diverse cultural, educational, and emotional needs of children, it was anticipated that the response opportunities would allow students to apply what they were learning. Students' responses were analyzed and coded to determine patterns and categories of responses. From the 1,450 response statements, three major categories emerged: application of assessment knowledge ($n = 342$), making sense of the story ($n = 651$), and affective responses ($n = 247$). Students who were making sense of the story predicted what was going to happen, connected the story with their own experiences, commented on charac-

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ters or story structure, and asked questions. Students applying assessment principles addressed the main character's needs and progress, and the classroom environment she experienced. The category of affective response included statements related to students' personal feelings about the story.

BULLION-MEARS, ANN. (1994). Developing collaboration and teacher reflection in a college curriculum class. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice,* (pp. 380–386). Chicago, IL: National Reading Conference.

Uses teacher reflection to analyze the development of collaborative practices in a secondary curriculum development and methods course. Participant observation methodology was employed by the course instructor during weekly 3-hour sessions and concurrent field observations in the public schools. Journal entries that described and interpreted classroom events and interactions were written by the researcher following each class. Archival data were also used, including student written work, course documents, evaluations, and walking journals (group journal). Repeated readings of data revealed recurring issues. Providing a forum for student voice was a form of collaboration that challenged instructional issues of ambiguity, power, and tradition.

LYONS, NONA. (1993). Constructing narratives for understanding: Using portfolio interviews to structure teachers' professional development. In Philip H. Dreyer (Ed.), *Learning from learners: Fifty-seventh yearbook of the Claremont Reading Conference* (pp. 1–17). Claremont, CA: Claremont Graduate School.

Presents a preliminary set of observations gleaned through interviews with student teachers as they reflected on the teaching experiences and artifacts used in their teaching portfolios. The pilot sample consisted of 15 Masters of Teaching students who entered a 1-year teacher education program at an eastern U.S. university. Students were asked to develop a portfolio and an interview in which they would talk about what they included and why. Five students were interviewed twice during the year. Presented is a case analysis of one preservice teacher from this longitudinal sample. Findings suggest that the portfolio interview may serve as a scaffold for the development of teachers' reflective thinking. The construction of narratives appears to be a critical element of the interview process.

BARTLETT, ANDREA. (1994–95, Winter). Uptapping the potential of early field experiences in literacy education. *Journal of Reading Education, 20,* 28–34.

Investigates the impact of structured observations and teaching assignments on students' learning from early field experiences in literacy education. Students in two sections of a university course titled Literacy and Literature were assigned to spend at least 75 minutes per week in elementary classrooms. Students from one section of the course were offered structured assignments, requiring them to complete 4 classroom observations on issues in literacy instruction and 6 weeks of individual tutoring and to teach a small group lesson and a whole class lesson. Students in the second section of the course had no field-related assignments. Students in both sections wrote journal responses after each classroom visit in response to the question, "What did you learn about literacy learning?" Responses for all 44 students were transcribed and coded for topic categories. Results showed that reading and writing were the areas most discussed. The percentages of responses in each category were remarkably similar across sections, with the exception that students in the structured section discussed reading 13% more than students in the unstructured section. Within the reading category, students in the structured section wrote higher percentages of responses concerning the reading process, reading skills, the social nature of reading, and teachers' cues to students. Students in the structured section also discussed the writing process appreciably more than did those

in the unstructured section (51% to 15%). Overall, responses of students in the structured section showed cognizance of the strategies children use while reading and writing.

HATT, ALISON; FOSTER, TOR; MENTER, IAN; & RILEY, SYLVIA. (1994, November). Teaching students, learning reading. *Reading*, *28*, 45–49.

Examines student teachers' preparation as teachers of reading in England, specifically how their views about the teaching and learning of reading are formed. Using questionnaires, tape-recorded discussions, course lectures, and notes of incidents, the researchers discerned a number of influences including the media, the students' own recollections of learning to read, and the reading course taken. Interviews with students revealed dissatisfactions with the ways their course work had prepared them as teachers of reading. Nevertheless, the researchers reported that the ways in which they commented indicated well-informed and critical approaches to literacy practices. Students reported a gap between the approaches advocated in their preparation and those encountered in their first teaching assignment. A number of themes emerged from the researchers' collective experiences, including (1) students experience the same course in very different ways; (2) students encounter the paradox of "learned ignorance," a contention that the more sophisticated their understandings become, the less confident they feel to teach; (3) students' understanding of teaching and learning of reading relate to their overall conception of what teaching is; (4) students' understanding of teaching reading is related to the ways in which they learn and how they learned to read; and (5) students' initial views of reading are linked to the levels of children that they are interested in teaching. The researchers concluded that those students who expressed the greatest anxiety about their preparation were those demonstrating the greatest skill and success in helping children to read.

PARATORE, JEANNE R., & INDRISANO, ROSELMINA. (1994). Changing classroom instruction in literacy. *Journal of Education*, *176*(1), 49–66.

Relates initial steps in developing a collaborative partnership between classroom teachers and university faculty focused on improving literacy instruction in one U.S. city's elementary schools. The participating school district was located in a small, low-income urban community in the northeast; the university was a large, private school. Formal evaluation of the existing literacy programs revealed that the teachers' instructional practices did not reflect current research and theory. To address concerns, professional development opportunities were planned collaboratively with the teachers. Early efforts involved only those teachers and schools that invited university input. Over a period of 4 years, administrators, teachers, and university faculty codeveloped a systematic, sustained, districtwide plan for introducing effective instructional practices. As a result, citywide, grade-level, biweekly seminars were initiated in the fifth year of the partnership. These allowed every teacher in grades 1 through 8 to participate in sessions focused on literacy instruction. Initial evaluations were based on observations of instruction and samples of the children's work and revealed changes in literacy instruction and learning.

JENNINGS, JOYCE H.; HIESHIMA, JOYCE A.; PEARCE, DANIEL L.; SHAPIRO, SHEILA; & AMBARDAR, ANITA K. (1994, Fall). A staff development project to improve literacy instruction in an urban school. *Illinois Reading Council Journal*, *22*, 47–59.

Describes a long-term school-university staff development program designed to promote literacy instruction in a Chicago, Illinois, public school serving preschool through eighth grade. Designed by university and school faculty and administration, the project plan consisted of 2 half-day inservices, 24 small group workshops, classroom instructional support, and individual conferences with teachers. To encourage more teacher direction in the project, the second year's effort emphasized more small group inservices than demonstration lessons, as well as designation of teacher leaders to serve as liaisons between the school and universi-

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ty. At the end of year 2, the principal reported that scores in reading and writing had improved. As a result, effort in the following year was extended toward other content areas and toward placing preservice teachers in the school. Monthly whole-school inservice sessions addressed broad topics and were followed up by in-depth exploration by small groups, as well as instructional support for teachers in their classrooms. Teacher evaluation of the project was overwhelmingly positive. Participation also affected the extent and nature of preservice students' involvement. Again, the principal reported improvement in average reading scores. Observations confirmed teacher implementation of strategic approaches to literacy instruction and more time and attention to reading and writing. The number of teachers volunteering to participate increased from 14 to 25. Characteristics of success seemed to include having a specific focus, a structured plan, voluntary participation, teacher input, commitment, and university support.

FLOOD, JAMES; LAPP, DIANE; RANCK-BUHR, WENDY; & MOORE, JUEL. (1995). What happens when teachers get together to talk about books? Gaining a multicultural perspective from literature. *The Reading Teacher, 48,* 720–723.

Discusses the changes occurring in participants of a book club. Twelve elementary teachers, their principal, and two university professors were members of the club, which met for an hour once a month in the school. Participants all read the same piece of contemporary multicultural fiction and maintained a response journal in which they reacted to it. Discussions of the work were videotaped and analyzed both quantitatively (gender and ethnicity of speaker, number and length of turns per member) and qualitatively. The literature discussions resulted in three general patterns for all participants: (1) growth in their understanding of multiculturalism, (2) gaining of new insights into their pupils, and (3) changing of some teaching practices.

RICHARDSON, VIRGINIA, & ANDERS, PATRICIA L. (1994). The study of teacher change. In Virginia Richardson (Ed.), *Teacher change and the staff development process: A case in reading instruction* (pp. 159–180). New York: Teachers College Press.

Summarizes the ways in which teacher change has been examined in traditional staff development programs and then discusses differences between the training model used in the traditional approach and a collaborative process approach followed in the Reading Instruction Study (RIS). The collaborative process, the Practical Argument Staff Development (PASD), is characterized as having an open-ended design, rich data, multimethod approaches to assessing teacher cognition, presentation of data collected during the staff development process to teacher participants, constructs of change emerging from the process and data, and case studies of individuals and groups. Three schools participated in the PASD process. Follow-up data were collected 2 years after the completion of the RIS project. Data collected during the RIS project and followup included classroom observations, teacher belief interviews, and practical argument sessions in which the staff developers and teachers viewed and discussed the videotapes. The followup included 13 of the original participants who agreed to participate in interviews and videotaped lessons again. Shifts were found in teachers' beliefs concerning theories of reading, learning to read, and teaching reading. Changes in practices included less reliance on the basal reader, the use of more prereading practices, the integration of literature into other subjects, and changes in grading and assessment.

TIDWELL, DEBORAH L., & MITCHELL, JUDY N. (1994). Teaching reading and observing teachers' practices. In Virginia Richardson (Ed.), *Teacher change and the staff development process: A case in reading instruction* (pp. 43–67). New York: Teachers College Press.

Reports a classroom observational study conducted to determine what teachers were doing in their classrooms. For 1 school year, 38 intermediate-level classrooms in 6 elementary schools located in 2 school districts were observed during instruction in reading comprehension. Three instruments were designed to use in recording observations: the pre observation instrument, the timed narrative record, and the follow-up questionnaire. Four trained observers conducted 76 classroom observations of lessons ranging from 13 to 80 minutes in length. Transcripts were coded and analyzed for lesson theme, focus, and practice. The lessons included 27 themes, 466 practices, and 15 focus areas. Overall, comprehending themes constituted 69% of the practices. The focus of the instructional approach tended to be teacher directed (24% of practices were teacher- or text-generated questions). In the second year of the project, 5 teachers from the same school were videotaped in the fall, prior to participation in a staff development process, and again in the spring near the end of the staff development. Changes in instruction occurred in teaching style, use of text, and outcome focus of the lesson. It was concluded that teachers used practices suggested by research and that they did teach reading comprehension. Beliefs and understandings changed as a result of the staff development program.

STEWART, ROGER A., & PARADIS, EDWARD E. (1993). Portfolios: Agents of change and empowerment in classrooms. In Donald J. Leu & Charles K. Kinzer (Eds.), *Examining central issues in literacy research, theory, and practice* (pp. 109–116). Chicago, IL: National Reading Conference.

Presents a case study of elementary teachers as they explored the process and results of portfolio implementation. The school, located in a small western U.S. town, had 3 classrooms per grade level (K–6) and approximately 450 students. Regular classroom (K–4), special education, and Chapter 1 teachers participated in after-school seminars in portfolio assessment at the school for graduate credit. Data included audiotapes of class sessions and noon meetings, field notes, informal and formal interviews, and artifacts from three consecutive semesters. The constant comparison analysis method was used to form categories and properties. Some teachers were ready to implement portfolios, and others were not. For those teachers ready for implementation, changes in curriculum, pedagogy, philosophy, and professional communication accrued as a consequence. For those teachers not ready to integrate portfolios into their teaching, fewer changes were evident.

ROE, MARY F. (1994–95, Winter). A comparative study of dialogue and response journals. *Journal of Reading Education, 20*, 8–25.

Explores the use of response and dialogue journals by students in a graduate literacy methods course as a way of gaining insight into the role of journals in teacher education. Specifically, the study investigated attitudes and perceptions the students developed toward dialogue and response logs, the content and purposes of their entries, and the distinctive attributes of the two formats. For the response journal, the 17 graduate students were directed to discuss ideas from readings and class explorations in a way that deepened their personal understanding of literacy education. Although the response journal was a private exploration, the dialogue journal provided a forum for written conversation between the instructor and student. Data sources included the journal entries themselves, a questionnaire designed to collect students' perceptions of the journal assignment and the two formats, and a follow-up interview. Responses to the Likert-scale questionnaire were examined for similarities and differences of responses using paired sample *t* tests. Journal entries were examined by thought segments and assigned descriptive category labels. Results indicated that these students engaged in the same general process regardless of the journal format. Functions that the journals served included allowing the graduate students to connect ideas from the course with their class-

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rooms, to explore selected topics, to improve their written expression, to assume a critical reading stance, and to change classroom practice. Preference for the dialogue journal over the response journal was statistically significant.

ROE, MARY F. (1995, Spring). Professional activity packets: Bridging to practice. *Journal of Reading Education, 20*, 30–41.

Investigates the use of professional activity packets in preparing teachers of reading. Professional activity packets are designed to mirror authentic professional activities by giving students choice of task and work partners, addressing teachers' professional responsibilities (such as analyzing curriculum guides), inviting multiple interpretations, and including a self-evaluation component. Students in both an undergraduate and graduate course taught by the instructor used the packets. Evaluation forms were analyzed to determine categories of response. The connections between response categories and the theory underlying the packets were considered. In general, the analysis revealed that the professional activity packets stimulated professional thought. Using the headings of the evaluation form, the researcher offers anecdotal evidence of students' preparing activities in a professional manner, fulfilling the expectations of the task, exhibiting personal reflection and independent thought, and extending understanding of literacy development and instruction. A sample of instructor comments was analyzed to determine how the instructor responded to the students' work. Most often the instructor discussed the students' ideas relative to their congruency, accuracy, and support.

II–4 Roles

HOFF, LAURIE R. (1994, October). From omnipotent teacher-in-charge to co-conspirator in the classroom: Developing lifelong readers and writers. *English Journal, 83*, 42–50.

Describes the process a teacher-author went through in changing her classroom in order to develop a love of reading and writing in students and presents some informal evaluations on the effectiveness of the changes. The classes described are high school classes for reluctant readers and writers. The change process began with the attempt to foster mutual respect and trust between students and teacher. Teachers implemented minilessons, and students took part in personal choice and self-assessment. Data in the form of student comments are presented. The teacher also notes how her own attitude has changed toward keeping abreast of and implementing new research findings and new ideas from professional journals and inservice work.

THOMAS, KAREN F., & RINEHART, STEVEN D. (1994). Instituting whole language: Teacher power and practice. *Reading Horizons, 35*(1), 71–88.

Investigates issues of power and empowerment in a school district instituting a whole language philosophy. To determine potential sources of conflict in implementing whole language classrooms, 100 kindergarten through ninth-grade faculty members were surveyed to determine their perceptions of administrative power, their professional backgrounds and personal literacy habits, and their current classroom literacy activities. All teachers cited three administrative constraints to implementing whole language practices: class size, time, and evaluating/grading requirements. Other constraints were mentioned particular to grade levels, including lack of resources and an articulated philosophy, mandated standardized testing, and lack of parental understanding. Teachers identified five personal constraints on their role in instituting whole language: curricular expectations, evaluation guidelines, time to set programs in motion, motivation techniques for students, and inservice help to address the writ-

ing process. Teachers who had taken a course in whole language reported that they devoted more hours to reading and writing in the classroom. Years of experience and reading professional journals also correlated with teachers' reading aloud and engaging their students in writing and sustained reading. Yet, even veteran teachers looked to administration for the necessary impetus for whole language rather than viewing themselves as change agents.

PIERSMA, MARY L., & ALLEN, DIANE D. (1993). A revitalized role for library media specialists in school reading programs. *Reading Horizons*, *33*(4), 347–358.

Reports the results of a survey designed to examine the role of elementary and secondary school media specialists in one southeastern U.S. state. Areas surveyed were the role of the media specialist in promoting reading growth, assisting classroom teachers, and teaching reading skills and strategies. Additional questions asked about the library media specialist's preparation in the area of reading, the contributions of the specialist to the existing reading program, and the desired contribution of the media specialist to the total reading program of the school. Data were collected from 546 specialists, 43% of the total media specialists sampled. Most media specialists had at least one course in reading methods. Data revealed significant differences between perceptions of current roles and what media specialists would like to accomplish in tasks related to reading. Most wanted increased time for reading to students, more planning time with teachers, and more time spent supporting student recreational reading. High school media specialists wanted more reading instructional time than did elementary media specialists.

BERGERON, BETTE S. (1994, Fall). Practitioners and curricular control: Exploring constraints to literacy change. *Journal of Reading Education*, *20*, 53–63.

Suggests insights gained from a 19-month collaborative inservice in one elementary school as teachers and the principal made changes in the school's literacy programs. Data were collected from informal conversational interviews, field notes, school artifacts, and the researcher's journal. Using a constant comparative analysis technique, the researcher generated assertions regarding the nature of the change process in the building and the role of the administrator in the change process. Change was initiated by both the principal and the teachers, with the administrator playing a primary role. Constraints to change were identified as (1) those imposed within the school district (preparation, evaluation, parental questioning, personal risk, program organization); (2) those imposed outside the district (achievement tests, professional outsiders); and (3) those imposed by time (preparation time, scheduling, and participants' feeling overwhelmed).

MCGEE, LEA M.; COURTNEY, LEIGH; & LOMAX, RICHARD G. (1994). Teachers' roles in first graders' grand conversations. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 517–526). Chicago, IL: National Reading Conference

Identifies roles teachers take as they support children in response-centered discussions (grand conversations) about literature. Two first-grade teachers and 12 children from two schools participated in the study. One school was located in the inner city of a large northeastern U.S. city; the other, in a small midwestern U.S. university town. Classes were observed as the teachers read three stories to children and then facilitated discussion about each title through open-ended questions and an interpretive question. Conversations between teachers and children and the purpose of teacher talk were tape recorded, transcribed, and coded and categorized into teacher moves. These moves were scored in 5 major roles: facilitator, helper/nudger, responder, literary curator, and reader. Both teachers' responses were mostly in the helper/nudger, responder, and facilitator roles. In the helper/nudger role, the teachers encouraged pupils to articulate their responses more clearly and fully and pushed them to think

about other possibilities in interpreting stories. Children were asked to clarify or expand on their responses or to provide a rationale for their thinking. Rarely did the teachers contribute their own responses during the conversations. The role of literary curator was seldom undertaken except to call attention to the title or dedication page or to pose the interpretive question.

II–5 Evaluation of programs and materials

BEAN, RITA M.; TROVATO, CHARLENE A.; & HAMILTON, REBECCA. (1995, Spring). Focus on Chapter 1 reading programs: Views of reading specialists, classroom teachers, and principals. *Reading Research and Instruction*, *26*, 204–221.

Interrogates classroom teachers, principals, and reading specialists concerning their beliefs about what was important in creating effective Chapter 1 reading programs and what they did about the problems and issues they identified. Focal group interviews were used in collecting data. Participants in the focus groups included 25 classroom teachers, 25 reading specialists, and 27 principals from 71 districts in Pennsylvania. The focal group sessions revolved around three major topics: descriptions of individual Chapter 1 programs, provisions made for collaboration, and general perceptions and attitudes about Chapter 1 programs. Focal group interviews were audiotaped, transcribed, and analyzed qualitatively. Findings were organized under three topics: creating and maintaining effective programs, roles of professionals, and strengths and problems of Chapter 1 programs. The importance of flexibility and localized control were noted by participants. Groups stressed that communication and collaboration between specialists and teachers were key elements to the success of the program. Emphasized, too, was the need for staff development to aid teachers and specialists to work more effectively as team members. Five major strengths of Chapter 1 programs were identified: they promote self-esteem, foster a love of reading, provide specialized instruction, serve as a student advocate, and facilitate parent involvement.

COME, BARBARA, & FREDERICKS, ANTHONY D. (1995). Family literacy in urban schools: Meeting the needs of at-risk children. *The Reading Teacher*, *48*, 566–570.

Describes the planning strategies, the school-university collaboration, the inschool literacy intervention activities, and the ideas for home-school connections in one program for at-risk students and their parents in an elementary school in Georgia. Program objectives included increasing student reading achievement, improving student and parent attitudes toward reading, increasing parental involvement in the school, increasing quality time families spend together, fostering home-school connections, and creating lifelong readers who become productive citizens. The authors note the importance of developing an intervention program with parents rather than planning a program for parents, if the program is to be successful.

KIEFFER, RONALD D., & FAUST, MARK A. (1994). Portfolio process and teacher change: Elementary, middle, and secondary teachers reflect on their initial experiences with portfolio evaluation. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 82–88). Chicago, IL: National Reading Conference.

Shares how 17 primary, middle, and secondary school teachers involved in a year-long qualitative study explored alternatives to traditional methods of assessment in the language arts. Ongoing analysis of the data during the year was used to define categories that emerged from the workshops, conferences, student interactions, teacher interviews (semistructured and in-depth), observational field notes, and pre- and postsurveys. Findings suggested that portfolios can be linked with teacher change if changes about methodology do not overshadow

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questions about the purposes driving particular evaluation and grading practices. At the end of the year, teachers appeared motivated to experiment with portfolios partly because of discontent with current evaluation and grading practices, which could not account for students' abilities and learning.

PLACIER, PEGGY, & HAMILTON, MARY LYNN. (1994). Schools as contexts: A complex relationship. In Virginia Richardson (Ed.), *Teacher change and the staff development process: A case in reading instruction* (pp. 135–158). New York: Teachers College Press.

Synthesizes the literature on school context and staff development and draws illustrations from two schools in the Reading Instruction Study (RIS). The literature on context effects is summarized under four headings with illustrations from the two RIS schools reported under each heading: (1) teachers' assessment of working conditions, (2) teachers' sense of autonomy, (3) support from school culture, and (4) teacher cooperation. As part of the findings, it was noted that the relation between school context and staff development, and ways to assess school context more adequately, need to be areas of continuing study. The context of the school culture as assessed at the start of the project no longer existed once the project began. Consensus on philosophical and pedagogical issues was not always easily obtained; indeed, underlying conflicts appeared among teachers' individual philosophies, and staff developers needed to mediate conflict.

BOS, CANDACE S., & ANDERS, PATRICIA L. (1994). The study of student change. In Virginia Richardson (Ed.), *Teacher change and the staff development process: A case in reading instruction* (pp. 181–198). New York: Teachers College Press.

Asks what happens to the quality of student learning when teachers participate in the Reading Instruction Study (RIS) project, a collaborative staff development project designed to focus on teacher change through reflection and integration of research-based practices. As part of student evaluation, two standardized measures were administered: the reading portion of the Iowa Test of Basic Skills (ITBS) and the Illinois Goal Assessment Program (IGAP). Children in grades 4, 5, and 6 in the two RIS participating schools and one contrast school were tested. In the first year of the study, 276 students completed pre- and posttest administrations of the two measures; a sample of 159 students was pre- and posttested for the second year of the project. In the first year of RIS, teachers in the two participating schools were involved in staff development, while teachers in the contrast school participated only in districtwide regularly scheduled staff development. During the second year, RIS staff development was not formally implemented in the two participating schools, while the contrast school participated in a traditional staff development program. First-year results of the ITBS showed no differences among the three schools when previous year's performance was used as a control. First-year results on the IGAP indicated students in the RIS schools scored higher than those in the contrast school. Significant differences among schools were not found in the second year of the study. It was felt that the IGAP was more sensitive to differences resulting from staff development than was the ITBS. It was recommended that staff development continue for more than one year.

ANDERSON, JIM, & LEE, ANDREA. (1995, Spring). Literacy teachers learning a new literacy: A study of the use of electronic mail in a reading education class. *Reading Research and Instruction, 34*, 222–238.

Investigates the use of electronic mail as an instructional tool in a graduate reading course. As one of the assignments in the 3-week class, participants were required to use electronic mail (e-mail) to circulate an outline of a seminar session. Both students and the instructor were not familiar with the use of e-mail. At the end of the semester, all e-mail mes-

sages were sorted and categorized under themes. Examples of e-mail messages appear under the theme headings of community building, requests for help-sharing, pedagogy, recursion and reflection, and risk taking. The discussion points out the problems involved including the lack of terminals dedicated to the project and the level of support needed. The authors note that the study demonstrated that e-mail has potential for teaching and learning at the university level. The caveat is expressed that individual students responded differently to e-mail and that it cannot be viewed as a panacea. A list of suggestions for the use of e-mail in a course is offered.

KIEFFER, RONALD D., & MORRISON, LINDA S. (1994, October). Changing portfolio process: One journey toward authentic assessment. *Language Arts, 71*, 411–418.

Describes the evolution of one second-grade teacher's application of authentic assessment techniques and presents initial documentation of the links she created between assessment and instruction in the language arts context. Study of the portfolio process was initiated during a graduate course on whole language philosophy and continued with the collaboration of one university professor. The teacher offered a literature-based reading and writing program to her class. Reading and writing portfolios were maintained for each student and included a range of products: written compositions, checklists of reading behaviors, tape recordings of oral reading, and running records. Review of teacher changes over time in regard to materials collected, procedures for selecting materials, student involvement in self-evaluation, student ownership of the portfolios, observations of instruction linked to assessment, and the teacher's reflections and plans for further development provided an ethnography of this teacher's initial steps toward using portfolios and developing authentic assessment techniques.

HILL, SARA LOUISA; LAWRENCE, ANNE H.; & PRITSOS, MARITZA K. (1995). Coffee klatch research: Learning about teachers in adult basic education. *Journal of Reading, 38*, 646–655.

Describes a project that explores the learning processes of two groups of adult basic education teachers working in two diverse literacy programs, one a program at the New York Public Library Centers for Reading and Writing, and the other an English for speakers of other languages program at the Hellenic American Neighborhood Action Committee. Over 6 months' time, data were collected from three focus group discussions and the subsequent transcriptions from questionnaires and in-depth interviews to determine what kinds of significant learning experiences teachers in the two programs had and how those experiences were influencing them as teachers and as learners. Themes emerging from the data suggested the emotional aspects of learning for these teachers, their sense of betrayal by the educational systems and by individual teachers within those systems, their need for and the importance of reflection on their own learning as a means for guiding their own teaching and their understanding of the learners they taught, the importance of hearing the perspectives of other teachers, and recurring concerns about the role of control and external and internal discipline in their classrooms. The data suggest the importance of the affective realm when establishing classroom environments for adult learners and the value of reflection and clearly established role expectations.

III. Sociology of reading

III–1 Role and use of mass media

CHEW, FIONA. (1994, Autumn). The relationship of information needs to issue relevance and media use. *Journalism Quarterly, 71*, 676–688.

Compares questioning behaviors toward a low- versus high-relevance issue. Over a 2-week period, data were collected from a mail survey of 133 usable questionnaires on the high-relevance issue and 121 on the low one. The subjects were asked to rate the frequency with which they had questions identified as orientation, reorientation, and construction. They rated four media (newspapers, television, radio, and magazines) in a 1–5 frequency scale. A 2 × 2 multivariate analysis of variance (MANOVA) with repeated measures was used to test for differences between the two relevance issues and among the six questioning behaviors reported. MANOVA, *t* tests, and chi-square were also used. The analyses showed that information needed varied by issue relevance. Questioning for the high-relevance issue pertained to obtaining expert opinion, gathering various viewpoints for decision making, and developing opinions. Those focusing on the low-relevance issue frequently wanted to find out about how the issue affected them. The number of media used by both issue groups was similar, but the frequency of use differed. The majority used all four media. Television, radio, and newspapers were used significantly more frequently by high-relevance issue subjects than by low-relevance issue.

MARTINELLI, KATHLEEN A., & CHAFFEE, STEVEN H. (1995, Spring). Measuring new-voter learning via three channels of political information. *Journalism & Mass Communication Quarterly, 72*, 18–32.

Explores the influences of newspaper, television news, and television ads on the political knowledge of new voters. The subjects were a cross-sectional group of newly naturalized U.S. citizens who completed a self-administered survey. Newspaper and TV news were tested for exposure, attention, and free recall of news; TV ads were tested for free recall and attention. The dependent variable was the subjects' knowledge of differences of issues held by the two 1988 presidential candidates. Data were tested by a planned hierarchical regression analysis of the relative contribution to issue knowledge made by the TV channels and the media measures. With traditional indicators of immigrant political socialization being controlled, each channel was found to make a separate, significant contribution to issue learning. Questions about attention were the strongest predictors for newspapers and TV. Recall of TV ads had the greatest predictive strength.

WEAVER, DAVID, & DREW, DAN. (1995, Spring). Voter learning in the 1992 presidential election: Did the "nontraditional" media and debates matter? *Journalism & Mass Communication Quarterly, 72*, 7–17.

Tests whether more attention and exposure to nontraditional news media, such as television talk shows and network TV morning shows, are predictive of subjects' increased knowledge of issue positions of presidential candidates, greater likelihood of voting, and increased interest in the 1992 campaign. The relation of radio, TV, newspapers, and televised debates to the foregoing variables is also investigated. Data were derived from telephone interviews between October 21 and November 2, 1992, with a random sample of 504 Indiana adults. Hierarchical multiple regression was used to test the variables. The results do not support the idea that nontraditional media—TV talk shows and televised network morning shows—contributed to increased knowledge of candidates' issues, to an increased intention to vote, or to higher levels of interest in the campaign.

AUFDERHEIDE, PATRICIA. (1994, Autumn). Controversy and the newspaper's public: The case of tongues untied. *Journalism Quarterly, 71*, 499–508.

Analyzes newspaper accounts of a controversial program carried on some public television stations. During the summer of 1991, 130 articles, mostly from newspapers, were analyzed. They were sorted into three categories: negative commentary and criticism, positive commentary and criticism, and reporting. Negative opinion articles questioned whether tax-

payers should support offensive expression. Positive opinion articles defending the publication were more numerous than negative articles. The positive opinion articles emphasized education, enlightenment, and free speech. Reporting included articles against government funding of like programs and about the number of public television stations refusing to carry the program.

III–2 Content analysis of printed materials

WALL, AUDREY NIXON. (1992). Gender-bias within literature in the high school English curriculum: The need for awareness. *English Quarterly, 24*(2), 25–29.

Analyzes for gender bias 21 novels identified as being commonly used in Canadian English classes. According to the quantitative analysis, 85.7% of novels were written by males as opposed to 14.2% written by females. Of the main characters, 82% were male and 18% were female. As secondary characters males (66.6%) outnumbered females (33.3%). Female characters were more submissive, more emotional, more sensitive, less confident, and less adventuresome than male characters. The results of the qualitative analysis showed the same gender bias that the quantitative analysis revealed.

JOLLIFFE, LEE, & CATLETT, TERRI. (1994, Winter). Women editors at the "Seven Sisters" magazines, 1965–1985: Did they make a difference? *Journalism Quarterly, 71*, 800–808.

Examines results of women in editorial control and whether sex role stereotyping is found less often in magazine content between 1965 and 1985. The goal was to determine the tone of each article and the strength or weakness of any central women characters portrayed. Characters' behaviors were coded as active mastery, passive dependency, and other; examined and coded as masculine or feminine traits; and coded according to how the author spoke to the women audience. Thirty-four traits of women were noted. Articles in one issue per year per magazine of seven magazines were content analyzed. The number of women editors and editorial department heads grew substantially at these magazines during the time period studied. During 1965–1975 positive portrayals of women were likely to increase, but in 1975–1985 women were treated in the same stereotypical way they were when men were editors. However, positive portrayals of women did increase.

MCSHANE, STEVEN L. (1995, Spring). Occupational, gender, and geographic representation of information sources in U.S. and Canadian business magazines. *Journalism & Mass Communication Quarterly, 72*, 190–204.

Evaluates the occupational, gender, and geographic representation of information sources in feature articles of four U.S. and Canadian business magazines. The research sample consisted of 1,404 sources identified in 160 feature articles (40 in each magazine). Data were collected on the occupation, sex, and geographic location of the sources. The results indicated that business journalists engage in bias along all three dimensions. They rely heavily on senior executives; government officials and lower level employers are seldom found as information sources. Female sources are significantly underrepresented in most occupational groups. U.S. business magazines (*Fortune*, *Business Week*) significantly overrepresent Middle Atlantic sources while underrepresenting the Midwest and Southwest sources. Canadian publications (*Canadian Business*, *Report on Business Magazine*) overwhelmingly use Ontario sources but underrepresent the Prairies and Quebec.

LEWIS, CHARLES, & NEVILLE, JOHN. (1995, Spring). Images of Rosie: A content analysis of women workers in American magazine advertising, 1940–1946. *Journalism & Mass Communication Quarterly, 72*, 216–227.

Inquires whether advertisers changed portrayals of women during and after World War II. A content analysis of advertisements was made of 3 magazines, 2 general-circulation magazines, and 1 women's magazine for the years 1940, 1943, and 1946. The sample included 1,957 full-page ads from 54 magazine issues. Those portraying women totaled 1,071. The major findings were reduced to two areas: occupational roles and occupational settings. Images of working women increased significantly from 1940 to 1943; images of women in no discernible occupational role decreased. In 1946 portrayal of women reverted to roughly the same level as prewar days. Settings for women other than the home increased from 5% in 1940 to 24% in 1943 and decreased to 6% in 1946. Chi-square was used to test differences. Advertisers did adjust substantially to the social, political, and economic transformations of the war years.

REID, LEONARD N.; KING, KAREN WHITEHILL; & KRESHEL, PEGGY J. (1994, Winter). Black and white models and their activities in modern cigarette and alcohol ads. *Journalism Quarterly, 71*, 873–886.

Compares model characterizations and activity portrayals of black and white models in cigarette and alcohol advertising. An analysis was made of 418 ads in 11 magazines from June 1990 through June 1991. Most of the characters in ads were segregated. Blacks were more often portrayed in leisure activities while whites were shown at work. Femininity is a more dominant theme for blacks while masculinity themes prevail for whites. The themes of living the good life and sports orientation did not vary between the two races. White males most often appeared alone. Portrayals of males and females together were present more often with blacks than whites. Other similarities and differences were noted. It was concluded that for the most part cigarette and alcohol advertisers target black and white smokers and drinkers differently.

LESTER, PAUL MARTIN. (1994, Summer). African-American photo coverage in four U.S. newspapers, 1937–1990. *Journalism Quarterly, 71*, 380–394.

Analyzes the content of more than 25,000 photographs in 4 newspapers for 4 months in each of 11 years between 1937 and 1990 to determine coverage of African Americans. The pictures were placed in four main subject areas (stereotypical images, race-blind images, special interest to African Americans, and advertising images). Three time periods were studied: precivil rights era, civil rights era, and modern era. Both the coverage of African Americans and stereotypical contents increased. The four newspapers generally emphasized the same content categories. When compared with a similar study in which magazines were analyzed, two differences were noted. Magazines focused more on social problems, whereas newspapers focused more on sports. Results were detailed for each newspaper.

LACY, STEPHEN, & RAMSEY, KARYN A. (1994, Autumn). The advertising content of African-American newspapers. *Journalism Quarterly, 71*, 521–530.

Explores advertising content in 72 issues of 35 African American newspapers published in May 1989. Four main coding categories of ads were used: display, legal, inserts, and classified. All ads were counted and measured in square inches. Total newspaper space was measured. The resulting data were compared for small, medium, and large newspapers. Spearman's rho and *t* tests were used to test the data. The advertising content was compared with that of white-oriented newspapers. Total advertising space averaged 32% of all space in the newspapers. The largest number of ads were local nonretail ads, such as service ones. The distribution of advertisements was similar among the circulation groups. White-oriented newspapers devoted 68% of their ad space to local advertising compared to 59% for African American papers.

EVANS, WILLIAM. (1995, Spring). The mundane and the arcane: Prestige media coverage of social and natural science. *Journalism & Mass Communication Quarterly, 72*, 16.

Compares the coverage of social and natural science in the *New York Times*, the *Los Angeles Times*, and network television evening news (ABC, CBS, NBC) from July through September 1989. Stories dealing with research findings from physical, biological, medical, and social science research were analyzed for two concerns: how the authors were referred to and the name of the journal as the source of the research if mentioned. A total of 377 stories focused on scientific research, 36.6% being social science and 63.4% being natural sciences. Compared to natural science, social science is portrayed in the media as a less distinctive and less valid way of knowing. Social scientists were not accorded the same authority as scientists, usually being referred to as writers, not researchers or scientists. Citations for natural sciences were largely from four journals; no journals were dominant for social science.

HERTOG, JAMES K.; FINNEGAN, JOHN R., JR.; & KAHN, EMILY. (1994, Summer). Media coverage of AIDS, cancer, and sexually transmitted diseases: A test of the public arenas model. *Journalism Quarterly, 71*, 291–304.

Examines the development and maintenance of topics on the public agenda and tests if it is necessary for an old topic to be displaced for a new issue to gain attention. The number of stories concerning AIDS, cancer, and sexually transmitted diseases in newspapers, television network news, the Associated Press, biomedical research journals, and the alternative press was estimated for the period of 1980 through 1990. The goal was to determine if there was a decline in other health problem studies when the AIDS stories increased in numbers. The percentage of stories on each topic was calculated. The relationship of the AIDS stories with each of the other topics was tested by correlation statistics. The evidence is mixed. What appears to be a displacement effect in a few newspapers is not found in the Associated Press, medical journals, or the alternative press. For television, a positive correlation coefficient was found between AIDS and cancer coverage. It was concluded that there is little if any significant displacement of one public health problem by another in the press or medical literature.

KING, ERIKA G. (1995, Spring). The flawed characters in the campaign: Prestige newspaper assessments of the 1992 presidential candidates' integrity and competence. *Journalism & Mass Communication Quarterly, 72*, 84–97.

Investigates assessments of the integrity and competence of each of the three presidential candidates in 1992 in the *New York Times*, the *Washington Post*, and the *Los Angeles Times*. All news and opinion-editorial items from every issue of each newspaper from September 7 to November 3 were content analyzed. A combination of quantitative and qualitative analyses was used to assess the amount, content, and tone of coverage. Assessments of candidates' characters were present in about 7% of all news items and one third of op-ed items, largely unfavorable in tone. Similar character assessments were carried in all three newspapers.

WELLS, ROBERT A., & KING, ERIKA G. (1994, Autumn). Prestige newspaper coverage of foreign affairs in the 1990 congressional campaigns. *Journalism Quarterly, 71*, 652–664.

Analyzes content of 4 prestige newspapers for the amount and substance of international and foreign affairs coverage and post–cold war congressional campaigns. Both news and editorial/commentary coverage were analyzed for 4 weeks prior to the elections. Themes in each paragraph were counted and coded. The 4 newspapers provided substantial coverage of international issues, which were discussed in 33,923 paragraphs. Almost half of the op-ed coverage focused on the Middle East. Coverage of congressional involvement in the foreign policy process was sparse, representing 4% of the total international news coverage. Foreign affairs issues re-

ceived less press attention than domestic issues for both news and commentary in all newspapers. The issues that received most coverage were conflictual ones, such as budgets and taxes.

DICKSON, SANDRA H. (1994, Winter). Understanding media bias: The press and the U.S. invasion of Panama. *Journalism Quarterly, 71*, 809–819.

Analyzes *New York Times* coverage of the U.S. invasion of Panama between December 20, 1989, and March 31, 1990. The 263 articles were coded according to type of sources, the valence of those sources, and the presence of governmental and nongovernmental themes. Sources were categorized according to whether they were positive, negative, or ambivalent toward the U.S. invasion of Panama. They were coded to determine the presence of governmental themes used by the Bush administration to describe the crises in Panama and nongovernmental themes that were contrary to how the U.S. Government wanted the situation portrayed. Of the 344 themes identified, 61% were categorized as governmental or those the Bush administration used to describe the invasion; 39% were coded as nongovernmental. Sixty percent of all themes mentioned in first paragraphs were governmental ones.

GUTIERREZ-VILLALOBOS, SONIA; HERTOG, JAMES K.; & RUSH, RAMONA R. (1994, Autumn). Press support for the U.S. administration during the Panama invasion: Analyses of strategic and tactical critique in the domestic press. *Journalism Quarterly, 71*, 618–627.

Studies through content analysis the reactions toward the U.S. invasion of Panama as reported in three magazines: *Time*, *Newsweeek*, and *The Nation*. The independent variable is the intensity of conflict between the United States and Panama. Dependent variables are press opposition to the administration's Panama policy on two levels: tactical (questioning techniques used to deal with the conflict) and strategic (questioning the underlying assumptions and worldview of U.S. foreign policy). During three periods between December 20, 1989, and April 20, 1990, 69 news stories, yielding 790 paragraphs, were found in the three sources. The two news magazines presented similar levels of opposition, the majority being supportive of the administration, with a fair amount of tactical opposition evident. Strategist opposition to the administration was virtually absent. *The Nation* differed markedly from the other magazines as it was vehemently critical of administration policy.

COULSON, DAVID C., & HANSEN, ANNE. (1995, Spring). The *Louisville Courier–Journal*'s news content after purchase by Gannett. *Journalism & Mass Communication Quarterly, 72*, 205–215.

Explores the effects of change of ownership on the *Courier–Journal's* news content. Forty weekday issues were analyzed, half being published for 2 years before the ownership change and half published for 2 years after the purchase. Two composite 5-day weeks for each year were developed representative of the entire year. Seven qualities considered important in an earlier survey were applied. Some 6,000 news items were analyzed. Most changes were statistically significant at the $p < .001$ level. Their significance was substantially diminished when measured as a percentage of an expanded news hole. There was a substantial increase in the size of news and photo content and a decrease in space devoted to advertising. The average length of news stories dropped markedly. Hard news declined when calculated as a percentage of the expanded news hole. Growth of wire service stories greatly outpaced staff written pieces, which decreased as a proportion of the enlarged news hole.

JOHNSTONE, JOHN W.C.; HAWKINS, DARNELL F.; & MICHENER, ARTHUR. (1994, Winter). Homicide reporting in Chicago dailies. *Journalism Quarterly, 71*, 860–872.

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Focuses on the coverage of homicide in two Chicago daily newspapers, the *Tribune* and the *Sun-Times*. Data for the entire year of 1987 came from two main sources: monthly homicide reports compiled by the Chicago Police Department and the incidents reported in the two newspapers. Data sheets were prepared for each murder reported. The two dependent variables were whether the homicide was reported and how much attention was devoted to it. To determine the latter, values were assigned to each article for minimal, moderate, and major attention. The independent variables were 14 characteristics of the victims, of the incidents, and of the census tracts. Fewer than one third of the 684 homicides were reported in either newspaper. Both were more likely to carry news that involved more than one victim, involved a male offender and female victim, and involved a white victim rather than a black or a Hispanic victim. Data were tested by regression analyses.

SHAH, HEMANT, & GAYATRI, GATI. (1994, Summer). Development news in elite and non-elite newspapers in Indonesia. *Journalism Quarterly, 71*, 411–420.

Compares, through content analysis, development news in one elite and one non-elite Indonesian newspaper in regard to topics covered, numbers of news items, space in column inches, length of story, and manner of reporting. Items from 16 issues of each newspaper were coded in one of 29 topic categories, were counted and measured, and were compared with 10 effective news reporting criteria. The 29 topics were also divided into three general categories. The non-elite paper devoted a greater proportion of space to development news, but the elite paper carried a larger number of development-news items and did a better job of reporting this news. These newspapers emphasized different topics. Of the three final categories, the most frequently reported on for both papers was economics. Of 487 front-page news items in both papers, 201 were classified as development news. Some development-news topics potentially important to national development were given little attention or ignored completely.

III–3 Readability, legibility, and typology

WANTA, WAYNE, & GAO, DANDAN. (1994, Winter). Young readers and the newspaper: Information recall and perceived enjoyment, readability, and attractiveness. *Journalism Quarterly, 71*, 926–936.

Asks young people what makes newspapers enjoyable and readable. The 204 high school subjects from 9 Illinois schools read and rated 20 newspapers for enjoyment, readability, and attractiveness. Subjects were asked to read the front page of one newspaper, to answer questions on its content, and to answer questions about their reactions to the newspaper. Independent variables were 5 content variables and 9 design variables. Stepwise regression analyses tested the influence of the independent variables on 4 dependent variables: enjoyment, readability, attractiveness, and information recall. Pullout quotes were significantly related to all 4 dependent variables, and the number of photos was positively associated with all but readability. Writing styles and the use of color had little influence.

HARTLEY, JAMES. (1994, September). Designing instructional text for older readers: A literature review. *British Journal of Educational Technology, 25*, 172–188.

Questions whether printed materials should be designed differently for older readers. Research is reviewed on aspects of simple and complex layouts of texts. The research with simple text layouts indicates little firm evidence that making design changes for older readers, except for increasing type sizes, facilitates performance. Some research suggested that changes made to facilitate the understanding of complex text appeared to hinder some older readers.

III–4 Reading interests, preferences, and habits

SHEORY, RAVI; MOKHTARI, KOUIDER; & LIVINGSTON, GARY. (1995, June). A comparison of native and nonnative English speaking students as college readers. *Canadian Modern Language Review*, *51*, 661–677.

Presents a comparative study of the self-reported reading habits of native-born, English-speaking undergraduate students and foreign-born nonnative students studying in the United States. The 130 native and 114 nonnative students were given a reading habits survey that requested information on the types of materials read, the amount of reading done weekly, self-perceived weaknesses in reading abilities, and self-perceptions of needed improvements in their reading skills. Chi-square analyses were used to test for differences between the groups. Nonnative students read a wider variety of academic reading materials than did native students; the reverse was true for nonacademic reading. Nonnatives spent more time on academic and nonacademic reading than did native students. Native students gave themselves significantly lower scores on their ability to read academic and nonacademic materials in English than did nonnative speakers in their language. More nonnative than native speakers reported a lack of adequate vocabulary and comprehension difficulties as major components of their reading difficulties. Both groups reported the need to improve their college reading skills.

BISWAS, RAHUL; RIFFE, DANIEL; & ZILLMANN, DOLF. (1994, Autumn). Mood influence on the appeal of bad news. *Journalism Quarterly*, *71*, 689–696.

Relates moods of people to their choices of reading selections. The subjects were 31 males and 33 female college students who were randomly assigned to conditions of affective state, positive or negative. They responded to an emotion recognition test in which they identified the mood of printed faces. Negative or positive feedback concerning their responses was given to subjects to establish their mood. They chose magazine articles to read from several they were given. Articles chosen were examples of either good or bad news. The bad-news stories were subjected to a 2 × 2 analysis of variance (ANOVA) with affective state (positive or negative) and subject gender as independent measures. Women in the bad mood group chose good-news stories, sampling more of them than women in the good mood group. Men did not show a preference. Women in a bad mood sampled less bad news than did men in a bad mood. Women in a good mood sampled more bad news than did men in a good mood.

III–5 Readership

STELMAKH, V.D. (1995, March). Russian reading in a period of social and cultural change. *International Information & Library Review*, *27*, 7–23.

Emphasizes significant features of reading, publications, and libraries in Russia today. The disintegration of the Soviet Union influenced the value system, including attitudes toward reading, as well as the state structures of politics and economics. No longer is reading the classics a status symbol. The classics have been abandoned as readers now enjoy light reading, such as detective or romance stories. For the first time Russian culture has stopped being excessively literature oriented. Imported examples of mass culture have grown enormously in number in all genres. School children constitute a large proportion of the library users. Readers have almost completely abandoned World War II fiction, multivolume epic novels, and novels about the working class and collective farms. New subjects that appeal to many readers are business, management, finance, law, religion and quasi-religion. Subscriptions to periodicals fell, but the numbers of different magazines rose. The destruction of the state monopoly in book publishing and the removal of censorship opened the book market and

gave readers a wider range of choice. Production of juvenile literature, popular literature, and fiction has increased considerably. Libraries face serious problems.

LEPIK, AIRA. (1995, March). Reading and readers in changing Estonia. *International Information & Library Review, 27*, 25–36.

Reviews research concerning the changes in the reading habits of Estonians in recent years. The Lutheran cultural heritage and the Estonians' ethnic homogeneity early influenced reading as a prestigious cultural activity. A growth of interest in reading in the 1960s and the 1970s was noted. After the transition to a market economy, reading became more casual and less frequent. The number of home libraries, prevalent earlier, decreased with emphasis shifting to public libraries. Economic and social insecurity have been related to the quantity and quality of reading done. Genre preference has not changed much, with the traditional social novel being a favorite. More nonfiction is being read than formerly.

HAMAN, ALES. (1995, March). Reading in Czechoslovakia 1989–1991: A survey of the public's reception of works of fiction. *International Information & Library Review, 27*, 75–87.

Surveys, over different periods of time, readers in Czechoslovakia about their most widely read authors. The results revealed that Czechs were more interested in fiction and works from the West than serious political works advocated by officials in their country. By the end of the 1980s, a network of public libraries had been established, which kept circulation records. In a short time many publishing houses emerged. A period of stagnation during the Communist regime led to a degradation of critical reading ability. Some of the controversial and sophisticated works of the West were acceptable to Communist authorities because they mistakenly characterized them as light fiction. Immediately after the demise of Communism, Czech public library users did not show a radical change in their choice of titles, but recently improved distribution of both "high" and "low" literature may have altered habits.

ADONI, HANNA. (1995, Spring). Literacy and reading in a multimedia environment. *Journal of Communication, 45*, 152–174.

Explores changes in reading behavior in Israel between 1970 and 1990. Home interviews were conducted with a representative sample of about 1,500 Israeli Jewish adults over age 20. This was a part of a larger study concerning cultural consumption that replicated, for the most part, a similar study in 1970. Three main aspects of reading were examined: quantitative (how much and how often reading was done), qualitative (literacy genres and complexity of reading) and functional (psychological needs). When the two periods were compared, there was a slight increase in newspaper reading and a slight decrease in book and magazine reading. Active reading correlated strongly with various cultural activities such as concerts and lectures. Both formal education and parental influence were essential in the development of active readers. The most popular genre at both times was fiction. In 1970 the second most popular genre was works about political affairs and current events, but not in 1990. The comparison of uses and of gratifications derived from books, newspapers, and television, shows that the print media are still considered powerful agents for fulfilling psychosocial needs. Correlation statistics were used in this study.

CARPINI, MICHAEL X. DELLI; KEETER, SCOTT; & KENNAMER, J. DAVID. (1994, Summer). Effects of the news media environment on citizen knowledge of state politics and government. *Journalism Quarterly, 71*, 443–456.

Examines the relation between what U.S. citizens know about state politics and government and the amount of information available to them through the news media. Citizens of Virginia in two media markets (a state capital, where much attention is given to state news, and

the Washington, DC, metropolitan area, where little media attention is given to state news) were contacted in three statewide telephone surveys in 1990 and 1991. The subjects were grouped into three geographic areas: northern Virginia, Richmond and neighboring counties, and the remainder of the state. To determine the levels of attention paid to state politics, a content analysis was made of three newspapers during four 5-day periods. The results of the multivariate analysis showed that residents in and near Richmond were significantly more knowledgeable about state politics than other people contacted. The content analysis demonstrated that the Richmond area residents were exposed to far more news of state politics and government than were other residents.

McGLATHERY, DONALD G. (1993, January/February). Does title confusion affect magazine audience levels? *Journal of Advertising Research*, *33*, 24–37.

Questions the three most frequently used magazine audience measurement techniques: Recent Reading as practiced by Mediamark Research, Inc., and the Nielsen Advertising Service; Through the Book as practiced by Simmons Market Research Bureau, Inc.; and The Frequency Technique as practiced by J.D. Power Car and Truck Media Reports. All three use a filter or screen question to reduce the number of journals for which respondents are asked the reading question. The screen is an effort to include only those who could have read the magazine within the previous 6 months and to eliminate individuals who are poor prospects for reading. However, screen-in levels vary by frequency of reading and thus affect the audience reading estimates obtained from the three systems. Differences obtained are most pronounced in the infrequent reader segment of the population, often due to title confusion. In an effort to explore title confusion, 9 pairs of journals, similar in name or content, were examined. It was found that when only one of the titles of such pairs appeared rather than both together, the screen-in level was elevated and higher audience levels resulted. When both name pairs are presented, the disparity in readers per copy between or among the similar titles often favors the smaller circulation titles. Title confusion is more likely to appear in infrequent or casual readers. Current evidence suggests that the screening process does not distinguish adequately between and among magazines.

III–6 Library usage and services

CHRZASTOWSKI, TINA E., & SCHMIDT, KAREN A. (1993, March). Surveying the damage: Academic library serial cancellations 1987–88 through 1989–90. *College and Research Libraries*, *54*, 93–102.

Analyzes serial cancellation lists between 1987 and 1990 from 5 U.S. midwestern university libraries. It was hypothesized but found not true that they were canceling the same or similar types of serials. The results showed that of 6,503 canceled titles, 281 titles (4%) were canceled in more than one library, resulting in 6,222 unique title cancellations (96%). Only 1 title was canceled by 4 libraries. The second hypothesis was that a composite of the typical canceled serial would most likely be a non-English science title, published outside the United States and costing at least US$200 per year. For most of these factors, the hypothesis was not supported because 82% cost less than US$200, almost 50% were published in the United States, and 74% were in English. One part of this hypothesis was supported: science titles in the Library of Congress Q (science), R (medicine), S (agriculture), and T (technology) classifications accounted for 40% of the cancellations, clearly representing a significant part of the cancellations.

BEISEMBAEVA, ZHANAT ABAEVNA. (1995, March). Reading in Kazakhstan. *International Information & Library Review*, *27*, 37–46.

Reviews research done by the library staffs in Kazakhstan between 1991 and 1994 and focuses on problems faced in the libraries there. Frequent changes in demands by readers have been caused by the changes in ideology, politics, and economics following the break-up of the Soviet Union. Reading became more utilitarian. Literature about Kazakhstan, current information, and nonfiction are preferred. After the collapse of the Soviet Union, the libraries found themselves in a difficult situation as they lost important sources of acquisition of materials, thus affecting readers and their information needs. The decision to encourage citizens to use the Kazakh language affected reading patterns.

III–7 Social and cultural influences on reading

FASHEH, MUNIR JAMIL. (1995, Spring). The reading campaign experience within Palestinian society: Innovative strategies for learning and building community. *Harvard Educational Review*, *65*, 66–92.

Describes in detail a reading campaign led by the Tamer Institute in Palestine. The investigator explains how the campaign combined learning with community building. The reading campaign began in 1992 following discussions about the status of Palestinian education. Various activities to encourage reading, especially among the school children, and to overcome negative feelings toward reading were adopted. Creative writing activities, the preparation of materials, and volunteer groups, especially youth groups, were a part of the project. A library subproject supported local initiative to create libraries and enrich existing ones. The project was able to create long-lasting change by combining resources already at hand in a supportive and creative way. Local community groups of adults and children are the reason for the project's success.

CHAMPION, SANDRA. (1993, Winter). The adolescent quest for meaning through multicultural readings: A case study. *Library Trends*, *41*, 462–492.

Examines the role one high school library media program plays in helping adolescent immigrants struggle with alienation, assimilation, and literary acculturation. Data came from interviews, especially with students, two surveys with 300 students each, samples of students' writing, and observations of students and teachers in the library media centers. Of the students interviewed, 57% were from Cuba and 43% represented 27 different countries, including the United States. Important factors that influenced students were a student-center learning environment that values cultural diversity, fosters learning, accommodates learning styles, promotes use of technologies, and encourages wide circulation of all materials. Group peer process of gaining meaning was the most important factor in literary acculturation. In discussions over a period of time, students noted cultural similarities and differences. They learned that one culture does not promote a typical literature, that no one book can represent a culture, and that literary acculturation is a process of personal and social change and choice caused by an individual's interaction with peers in a wide variety of literary experiences. The results of this case study showed that the library media program is vital in the process of literary acculturation.

III–8 Literacy and illiteracy

PURCELL-GATES, VICTORIA; L'ALLIER, SUSAN; & SMITH, DOROTHY. (1995). Literacy at the Harts' and the Larsons': Diversity among poor, innercity families. *The Reading Teacher*, *48*, 572–578.

Describes the ways in which 4 low-socioeconomic status families use print in their daily lives. Field researchers visited in the homes to record all naturally occurring uses of print over 2 to 3 months for both types and frequencies of incidents. Although all these families were functionally literate and similar in socioeconomic status, literacy practices varied. Two families were classified as low literacy; two as high literacy. The high-literacy families engaged in 8 times more literary events per hour than the low-literacy ones. For the high-literacy families, print permeated their lives. The majority of the literacy events for the low-literacy families were those of entertainment and daily living routines. Literacy events for the high-literacy families were largely literacy learning, storybook reading, and entertainment categories.

EDWARDS, PATRICIA A. (1995). Empowering low-income mothers and fathers to share books with young children. *The Reading Teacher, 48*, 558–564.

Describes one program, Parents as Partners in Reading, and how parent leaders influenced other parents in developing literacy in their children. The program was designed to help low-income parents meet two expectations schools have of parents: to read to their children and to be good literate models. Four parent leaders were selected to lead one of four groups. They continued to influence the ways in which the mothers and fathers in their groups learned to share books after the program developer was no longer active in monitoring the program. The book-reading program developed by the parent leaders was loosely structured and interest driven. The leaders adapted the book-reading program to reflect the participants' culture and to help them use reading to fit their needs.

MOULTON, MARGARET "COOKIE," & HOLMES, VICKI L. (1995). An adult learns to read: A family affair. *Journal of Reading, 38*, 542–549.

Examines the connections between family support and learning to read as an adult in an exploratory case study. A 47-year-old man learning to read in a university reading clinic surpassed other men receiving instruction. His progress and the involvement of his family in his reading were studied. Data collected included observations of the man during instruction, visits to his home, and interviews with family members. His progress escalated when he told his family about his problem and his intention to learn to read. When he involved his family in his learning, he began making literacy a part of his daily life. As measured by Burns' and Roe's Informal Reading Inventory, his reading level improved 4 grade levels in 6 to 7 months (a time period of fewer than 60 hours).

ZAKALUK, BEVERLEY L., & WYNES, BARBARA J. (1995). Book bridges: A family literacy program for immigrant women. *Journal of Reading, 38*, 550–557.

Describes a community-based family literacy program in Winnipeg, Canada, which offers direct service to adults and indirect service to children, who are mostly immigrants. The project consists of 60 hours of instruction over 10 weeks and is offered twice a year. Certified teachers and volunteers are the instructors. The goal of the program is increased literacy for parents and children achieved through composing and sharing stories. Experiences of immigrant mothers in a reading workshop, a writing workshop, and literature circles result in the development of English literacy, personal growth, and self-confidence and self-esteem. Multiple measures were used to determine the success of the first program in the fall of 1990. Significant gains were made on the comprehension subtest of the Gates–MacGinitie Reading Test, level D, but the women were not so successful on the vocabulary section. Informal evaluations were made from comments they wrote in their journals and from interviews. Three years later, follow-up interviews were done with 14 of the 32 participants. They had made good progress in obtaining jobs, in developing self-confidence, and in accomplishing goals on their own.

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DE AVILA, MARCIA; LEDNICKY, DONNA; & PRUITT, KATY. (1993, September/October). Family literacy: Holistic approaches to family literacy facilitate learning of at-risk families. *Adult Learning, 5*, 15–16, 23.

Describes results of a 2-year pilot program in one Texas school district designed to involve all family members in a holistic approach to family literacy. Funded by the Texas Education Agency, the program offered adult education classes, parent group meetings, developmental child care, and tutorials for children. Over 100 families participated during the 2 years of the program. In each family, at least one parent was enrolled in adult literacy classes including Amnesty, ESL, vocational, adult literacy, and ABE/GED classes. Parent group meetings were held weekly and focused on parenting strategies, child growth and development, community resources, and life skills management. Tutoring services were provided for children ages 5 to 12. In addition, home visits and family field trips were incorporated into the program. At the end of the program, 62 parents had completed at least 50% of the GED test preparation materials, 5 passed the entire GED battery, 5 others passed at least one or more parts of the battery, and 5 were scheduled to take the exam. The remaining 47 showed at least 3 years of growth in reading, math, and writing and were continuing GED classes. Other aspects of the program evaluation are presented.

ROSENBERG, SHEILA OTTO, & ALWORTH, MARTHA. (1995, January/February). A Texas state initiative for family literacy. *Adult Learning, 6*, 17–18.

Reports on 10 projects promoting family literacy under the Texas Literacy Council. These programs focus on the entire family and develop parental literacy behaviors that positively influence children's achievement, attendance, and motivation. The programs recognize two groups: undereducated adults and children at risk. Family literacy has grown in 10 years from a program supported by seed money to one supported by federal legislation and policy directives. Based on results of the academic year 1992–1993, several conclusions were made. These programs have more holding power for adults than typical adult programs. Parents in family programs increase their skills almost twice as fast as those in other adult programs. Children make greater developmental gains than children in programs with less parental involvement.

FARR, MARCIA, & GUERRA, JUAN C. (1995, January/February). Literacy in the community: A study of Mexicano families in Chicago. *Discourse Processes, 19*, 7–19.

Describes oral and written language in a Mexican community in Chicago through long-term participant observation. The embedded nature of literacy practices is found in two domains: the Immigration and Naturalization Service and the Catholic church. In the first domain, the literacy is English; in the second domain, religion, the literacy is English and Mexican. Two religious events held in the home that involve the use of print by more than one participant are described. Special tutoring classes held in the homes help the subjects prepare for various requirements of the first domain, especially those related to citizenship. It was concluded that many adults with limited literacy manage a variety of literacy practices that serve their needs better than people recognize.

ASKOV, EUNICE N. (1994). An intergenerational survey and case studies of technology in adult literacy. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 189–194). Cheshire, England: United Kingdom Reading Association.

Identifies adult literacy and technological practices that can be shared across countries and cultures. On a 3-month sabbatical, the researcher conducted interviews and examined available artifacts in a variety of countries from predominantly rural to modern industrialized. Observations made in interviews, documents (research reports, curriculum materials,

policy papers), and a survey were the data source. A detailed journal was kept and photographic slides were collected. The observations were validated by checking for accuracy with at least one key person in each country. Presentation of findings are organized as "ideas worth sharing" from Fiji, Hong Kong, China, Thailand, India, and Greece.

TAYLOR, RONALD L. (1995). Functional uses of reading and shared literacy activities in Icelandic homes: A monograph in family literacy. *Reading Research Quarterly, 30,* 194–219.

Investigates the shared literacy activities and uses of reading among families in Iceland, a country with a literacy history of 2 centuries. The Familia Inventory and family data were completed by 55 families. Later, structured interviews were conducted with each of 12 families. Naturalistic data included responses to questions in interviews, activities in journals that the families kept, and artifacts relating to literacy activities in the homes. Thematic analysis assessed and categorized responses and observations of the 12 families regarding their reading activities. Standard calculations of reliability and correlational studies provided comparisons of a statistical nature on the data collected from 55 families responding to the Familia Inventory. No quantitatively significant differences were found between urban and rural families in their literacy activities. Relations between shared activities and higher educational levels of mothers were demonstrated. The most frequently named and observed uses of reading were enjoyment, pleasure, and relaxation.

COLLINGNON, FRANCINE FILIPEK. (1994). From "Paj Ntaub" to paragraphs: Perspective on Hmong processes of composing. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and literacy: An interactionist perspective* (pp. 331–346). Cambridge, England: Cambridge University Press.

Reports on-going action research designed to identify a culturally appropriate pedagogy for reading and writing instruction among Hmong women. Learning activities of adult Hmong women were analyzed in an effort to connect literacy with a preexisting function. At an early age, almost all females begin learning to sew the traditional Hmong textile art, paj ntaub. In interviews with women learning ESL literacy skills, the similarities between the processes employed in sewing and in studying English emerged. By exploring the cultural roots in collaborative-action research, it is possible to provide a tool for linking theory and practice in identifying an effective pedagogy.

RAMIREZ, JUAN DANIEL. (1994). Adults learning literacy: The role of private speech in reading comprehension. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and literacy: An interactionist perspective* (pp. 305–330). Cambridge, England: Cambridge University Press.

Analyzes some of the daily work of a group of female students and their instructor in a school for adults in southern Spain. The study focuses on 6 women between the ages of 40 and 65 who were functioning at the level of initial literacy learning. Particular attention is paid to the role of the private speech in the process of articulating the written word and in the comprehension of what is read. Differences among subjects in the intensity of the voice were observed and described. Examples of the subjects' use of private or inner speech are offered. The author concluded that (1) there is a close relation between the level of reading skill and the articulation of the word being read: the poorest reader articulated syllables in a higher tone of voice while the best reader whispered the least; (2) private speech aided in the identification of words read syllable by syllable; (3) private speech in the form of questions or orders was an effort to pay more attention to the reading; and (4) insight into the word that completes a

sentence or text results in intonation higher than other words. Comprehension is aided where there is identification between the author's and the reader's voice.

STROMQUIST, NELLY P. (1992). Conceptual and empirical advances in adult literacy. *Canadian and International Education, 21*(2), 40–54.

Reviews research, practical concerns, and theories concerning adult literacy. Contributions from different disciplines—sociolinguistics, anthropology, cognitive psychology, and education—were reported. This work has highlighted the complexity, social embeddedness, and variety of uses of adult literacy. Differences have been found by different groups in definitions and measurement of literacy and contributions from research. Aspects of adult literacy that need to be researched are discussed.

LUKE, ALLAN. (1994, July/August). On reading and the sexual division of literacy. *Journal of Curriculum Studies, 26*, 361–381.

Reviews research and expert opinion about the need for feminist reconceptualizations of reading as gendered practice in reading and the school curriculum. It was argued that educators should consider the political and economic efficacy of literacy for girls and women, and that teaching, learning, and use bears a necessary connection to the gendered politics of everyday life.

NWAKEZE, PETER C., & SEILER, LAUREN H. (1993, September/October). Adult literacy programs: What students say. *Adult Learning, 5*, 17–18, 24.

Reports the results of surveys conducted by the Literacy Assistance Center (LAC) to find out how adult students viewed the literacy programs created by the New York City Adult Literacy Initiative (NYCALI). In 1988, 1989, and 1990, the LAC surveyed the same panel of 162 adult literacy students. In 1992, focus groups were conducted to review findings from the surveys. Ninety-seven percent of students said that they valued their programs, and 90% of students in 1989 rated their programs as either good or excellent. The areas of concern singled out were satisfaction; learning environment; teachers; retention; and other issues such as curriculum, classroom heterogeneity, daily living skills, evaluation, and jobs. Students felt that a supportive learning climate was critical to their education. They felt that the attitude of the teachers often was responsible for students' not liking a class. More women than men enrolled in the programs, a fact that students thought was a failure of the system. Safety and child care needs were not always met. It was felt also that programs needed to focus on achievements and to give out awards.

MALICKY, GRACE V., & NORMAN, CHARLES A. (1994). Participation in adult literacy programs and employment. *Journal of Reading, 38*, 122–127.

Explores the relation between participation in literacy programs and employment status. The sample consisted of 94 adults enrolled in literacy programs in one Canadian urban center, with reading levels between 2.1 and 9.2. Data were derived from formal testing and interviews across a 3-year period. Most of the participants stated their reasons for enrolling in the program were to get a better job and to make more money. Nineteen changed their vocational goals over the course of the study. In relation to previous employment, all except five had been employed either full-time or part-time at some point in their lives. The stereotype of the chronically unemployed adult illiterate was not supported in this study. Following the programs, most returned to the same low-paying employment as they had prior to participation in the literacy programs.

RHODER, CAROL A., & FRENCH, JOYCE N. (1994). Workplace literacy: From survival to empowerment and human development. *Journal of Reading, 38*, 110–120.

Presents an example of a workplace literacy program that reached workers in various departments of a large hospital. The program was called a "communication class" to avoid any

embarrassment to the workers and to reflect a holistic approach that included speaking, listening, reading, and writing. The program was custom made for each site, grounded in adult-learning theory, and reflected current theory and research in adult learning. The communication framework was supplemented with problem solving. The first module, literacy for survival, focused on skills needed for specific tasks. The second module emphasized control over one's life, both at work and at home. Literacy related to departmental problem solving was included here. The third module, human development, gave the employees opportunity to read and write about issues important to them. Standardized tests were not used for assessment. The program's assessment was based on interviews at three different times, which reflected workers' increased participation in literacy activities, high attendance, job promotions, productivity and work-quality records, attitudes, and additional training. It was concluded that everyone benefited from a workplace literacy program.

WALES, M. LYNN. (1994). A language experience approach (LEA) in adult immigrant literacy programs in Australia. *Journal of Reading*, *38*, 200–208.

Reports on a language/experience approach with adult employees at the railway workshops in Newport, Victoria. Employees were immigrants mostly from Europe with little knowledge of the English language. Classes were formed by taking workers from different sections of the workplace. The first 100 hours was an orientation period and a time to express their language learning needs. They produced, with the help of their instructors, their own reading text from talks about their experiences. They were guided in improving their contributions. The adjusted text became the basis of a number of activities. A whole-word approach to word recognition was used. No self-generated writing was undertaken in the first 100 hours. During this time the adults were introduced to materials written by others. At the end of the 200 hours, most could write self-generated correct sentences in English for their everyday needs and had progressed well with their reading.

MERLIN, SHIRLEY B. (1994). Workplace literacy: Why participants dropped out of school and why they remain in a workplace program. In Elizabeth G. Sturtevant & Wayne M. Linek (Eds.), *Pathways for literacy: Learners teach and teachers learn* (pp. 109–116). Pittsburg, KS: College Reading Association.

Asks why participants entered and remained in a workplace literacy program and why they had originally dropped out of school. The Career Enhancement Program was administered by a local university and provided on-site instruction specific to job competencies and adult basic education (ABE) and General Educational Development (GED) skills. The subjects were 156 ABE/GED students and 44 ESL students enrolled in the program from five different companies. Three of five exit interview questions required a yes or no response and serve as the data source in this report. Results indicate that nearly all of the ABE/GED group entered the workplace literacy program for personal reasons such as completion of the GED program and career advancement. The ESL adult learners cited communication and improving job status as program goals. Needing to get a job and financial and personal problems were listed as the students' main reasons for dropping out of high school. The importance of attending to the workers' personal goals in order to motivate participants is highlighted.

BLACK, SHARON, & MCOMBER, RACHEL. (1994, Spring). Now I know.... *Contemporary Issues in Reading*, *9*, 143–149.

Presents the literacy story of an adult illiterate from his memories of unsuccessful early school experiences to the coping strategies of his adult work life. At age 54, he was persuaded to try to learn again by a reading teacher. Beginning with practice with letters, sounds, and blending, then moving toward simple controlled vocabulary stories and books, the

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man's literacy progress is chronicled, including his self-satisfaction when he successfully completed *Black Beauty*, a novel he had been unable to read as a child.

NURSS, JOANNE R.; BAKER, DAVID W.; DAVIS, TERRY C.; PARKER, RUTH M.; & WILLIAMS, MARK V. (1995). Difficulties in functional health literacy screening in Spanish-speaking adults. *Journal of Reading*, *38*, 632–637.

Describes efforts to develop a Spanish-language word-screening test for health practitioners to assess quickly patients' literacy levels. Based on an English version screening test, words were placed into 3 columns of increasing difficulty. The Spanish version was given to 52 patients; no correlation was found between scores and years completed at school. A second version proved to be more difficult, but the distribution was skewed like the first one. This test was correlated with the Spanish Test of Functional Health Literacy for Adults. A comparison of subjects' standing by quartiles showed extreme discordance. Because of the regularity of the language, these subjects could pronounce the words but did not always understand the meaning.

HUCK, GERHARD, & HOWARD, JOSEPH. (1995). The impact of political and socioeconomic changes on adult literacy in the new federal states of Germany. *Journal of Reading*, *38*, 680–682.

Relates steps taken for the development of a new literacy program in the former German Democratic Republic. Until the middle of 1989, there was no official recognition of the presence of functional illiteracy here. Officials were opposed to scientific research on the topic for political reasons. Data supporting the need for a literacy project came from a questionnaire sent to 203 educational institutions throughout the new federal states and from interviews with educators. Meetings were held to enhance public opinion. Workshops were held to develop methods and materials and to train tutors. In 1992, the 23 adult education institutions offered a total of 361 literacy sources for 235 participants.

III–9 History of literacy

LEPORE, JILL. (1994, December). Dead men tell no tales: John Sassamon and the fatal consequences of literacy. *American Quarterly*, *46*, 479–512.

Provides an example of the consequences of cultural conflict and the role that literacy can play in accelerating that conflict. John Sassamon, a highly literate New England Indian, was murdered in 1675. Native American political sovereignty began to erode with the arrival of the first English settlers. Attempts to convert them to Christianity and teach them to read and write, especially English, expedited this process. Although there were literate Indians, none wrote about their early history, including King Philip's war in which thousands of Indians were killed or sold into slavery. Someone had hated Sassamon enough to murder him; it was his death that immediately led to that war. This account details the steps in his rise and fall and the effects that literacy had on him. With the acquisition of literacy, he found himself in the complicated position of mediator between different cultures.

III–10 Newspaper publication

COULSON, DAVID C. (1994, Summer). Impact of ownership on newspaper quality. *Journalism Quarterly*, *71*, 403–410.

Questions whether group or independent ownership of newspapers is viewed by editors and reporters as having a greater journalistic commitment to the concept of a strong local newspaper. Questionnaires were completed by 773 journalists, including editors and reporters. They held generally positive opinions about their papers' local news coverage. Journalists at independent papers more often rated their papers' commitment to quality local coverage as excellent and were more likely to strongly agree that their newspapers provided an appropriate amount of local coverage. Editors and reporters were pleased with the performance of their newspapers, but they differed in most of their responses. Type of ownership was not a factor. Statistically significant differences were evident between reporters and editors regarding the editorial quality of their newspapers.

HYNDS, ERNEST C. (1994, Autumn). Editors at most U.S. dailies see vital roles for editorial page. *Journalism Quarterly, 71*, 573–582.

Surveys 199 newspaper editors concerning various aspects of their editorial pages. This study provided comparative data about editorial page features for similar studies conducted in 1975, 1983, and 1992 by the same investigators. Editors completed a 4-page questionnaire. They believe editorial pages provide information, analyses, benchmarks, and public forums that assist readers in making decisions and taking action on issues. Almost all continue to use editorials, cartoons, columns, and letters as staples of their editorial pages. Best read, in order, are letters to the editor, editorials, syndicated columnists, and cartoons. Most editors felt their editorials had some kind of influence on readers. Most still write their own editorials. A significant decline in political endorsements was found. These editors continued to be more positive than negative about current trends in editorial pages.

HANSEN, KATHLEEN A.; WARD, JEAN; CONNERS, JOAN L.; & NEUZIL, MARK. (1994, Autumn). Local breaking news: Sources, technology, and news routines. *Journalism Quarterly, 71*, 561–572.

Investigates the characteristics of breaking news in 10 large, metropolitan newspapers that have adopted electronic information technologies. Content analysis and interviews with reporters provided the data. From 30 issues published in May 1992, 23 stories were content analyzed using story placement, length, number and types of sources, presence of photographs, and reporter bylines. In-depth interviews were conducted with reporters of 7 of these stories by a computer-assisted telephone setup. Questions were designed to elicit information to be used in a comparison with results of classic newsmaking studies. The content analysis revealed that news writers rely on the same types of sources representing the same institutional and social power structure as in classic approaches. Those interviewed reported making heavy use of their own papers' electronic backfiles and fax technology but do not use other information technologies available to them.

CAMERON, GLEN T., & CURTIN, PATRICIA A. (1995, Spring). Tracing sources of information pollution: A survey and experimental test of print media's labeling policy for feature advertising. *Journalism & Mass Communication Quarterly, 72*, 178–189.

Explores feature advertising or single advertisements designed to look like editorial copy and performs an experiment to test the efficacy of labeling advertisements. The results of a questionnaire completed by 171 editors and advertising managers revealed that print media typically have an unwritten policy to label feature ads as advertisements. The experiment was a mixed 2 × 2 factorial design. Two independent variables were delay (immediate recall vs. 2-week recall of material) and label (presence or absence of an ad label). Four dependent variables were recognition of message content, recognition of label, cued recall of message content, and cued recall of label. The 42 subjects (college students and other adults) read magazine and newspaper excerpts, which contained both advertisements and editorial

comment and were tested in two sessions. ANOVA was used to test the data. The results suggest that feature ads detract from editorial credibility of a publication and that current labeling policy does not adequately address the problem.

WILKE, JÜRGEN, & ROSENBERGER, BERNHARD. (1994, Summer). Importing foreign news: A case study of the German service of the Associated Press. *Journalism Quarterly, 71*, 421–432.

Analyzes how the Associated Press treats English language news in Germany, investigates possible criteria used in selecting the news, and examines how it is translated and revised. To determine criteria used in the selection of news for publication, a content analysis was conducted for news accepted and rejected. In one week, 317 news items were selected and 1,724 were discarded. This comparison did not provide a coherent explanation of the selection process. All news items were then evaluated for 9 news values. The news included in the German service had higher news values than the discarded items, the difference being statistically significant.

III–11 History of newspapers and magazines

ROSS, FELECIA G. JONES. (1994, Autumn). Preserving the community: Cleveland black papers' response to the great migration. *Journalism Quarterly, 71*, 531–539.

Compares the reaction of two competing black newspapers, the *Cleveland Gazette* and *Cleveland Advocate*, to the migration of southern blacks during World War I. This study was based on an examination of articles and editorials that appeared in both newspapers between 1914 and 1921. These newspapers represented divergent philosophies concerning race matters. The *Gazette* advocated uncompromising racial equality and viewed the migration as a weapon against oppression. The *Advocate* considered the migration as a way to increase black solidarity. In spite of their differences, both papers advocated race progress by urging the community to help the migrants succeed in their new home.

COWARD, JOHN M. (1994, Autumn). Explaining the Little Bighorn: Race and progress in the native press. *Journalism Quarterly, 71*, 540–549.

Describes the social and political role of two active Indian Territory newspapers around the time of the Little Bighorn when Indian and white relations were strained. The *Cherokee Advocate* and *Indian Journal* were both promoters of Indian progress, which appeared jeopardized in spite of differences between the two publications. The study examined the public relations strategies used to explain the Indian victory over Custer to their native and nonnative readers. As a case study, the research revealed how these minority newspapers used language and ideas to mediate and defuse a threatening political position.

III–12 Book and magazine publication

GRECO, ALBERT N. (1992, Fall). U.S. book returns, 1984–1989. *Publishing Research Quarterly, 8*, 46–61.

Analyzes the book return phenomenon occurring between 1984 and 1989, when almost 24% of all books published were returned to publishers by wholesalers and booksellers. A review of the Association of American Publishers data revealed that the mass market paperback segment led in the number of returns (almost 37% of all returns), followed by the college market (17.3% of the total). Returns grew to more than 59% between 1984 and 1987,

with an additional 19% growth in the next 2 years. Total returns nearly doubled during the 6-year period investigated. Returns considerably exceeded both the annual and the total increases in inflation during that time period. When analyzed by niche, adult trade hardbound books showed a 146% increase in returns during the period, and adult trade paperback books showed a more stable and modest return-rate growth (42%). Overall returns for juvenile hardbound books grew 154% between 1984 and 1989, while the juvenile paperbound books segment showed a 380% increase in book returns.

HAUGLAND, ANN. (1994, Winter). Books as culture/Books as commerce. *Journalism Quarterly, 71*, 787–799.

Analyzes how the *New York Times Book Review* reflects two goals of the book industry: contributing to the cultural life of society and making a profit. Two lists of books were basic to this study: 14 books on the Editors' Choice books list and 14 best sellers. Reviews, ads, and mentions of titles in the 52 issues in 1990 for the 28 book titles were tabulated and analyzed. The goal of the study was to identify elements of the book review that supported cultural and commercial sides. Best selling books (commercial role) received significantly more coverage in ads and on best seller lists than did Editors' Choice books representing the cultural role. Conversely, Editors' Choice books received significantly more coverage in reviews and other editorial features than did best selling books.

TRIGGS, TEAL. (1995, Winter). Alphabet soup: Reading British fanzines. *Visible Language, 29*, 73–87.

Reviews the history and characteristics of "fanzines," journalistic vehicles of subcultural communication that came from amateur and politically printed materials. The emphasis here is on the numerous fanzines in Great Britain. The term fanzine was coined in 1941 in the United States and described publications primarily devoted to science fiction and superhero comic enthusiasts. They now embrace any subject faithful to specific interests of their "fans." Usually published on a noncommerical basis, alternative or independent, they are typically based on different issues such as women's rights or environmentalism. They seek to break conventional rules of typographic and visual communication. In spite of their diversity of content and editorial approaches, they keep a unified stylistic vocabulary.

APPEL, VALENTINE. (1993, January/February). Anatomy of a magazine audience estimate: The ARF comparability study revisited. *Journal of Advertising Research, 33*, 11–17.

Tests two procedures (Through the Book and Recent Reading) to estimate magazine audience sizes. The first step in both was the subjects' indications of whether a number of magazines had been seen or read in the last 6 months. In one procedure, subjects were shown stripped-down issues of titles to be measured and were asked if they had read or looked at them. In the other procedure, subjects were asked if they had read or looked at the periodical in its last publication date. Three probability samplings were used to test audiences for 68 titles. Regardless of the methods used, step 1 (the screen-in lead) was the principal determinant of differences in magazine audience sizes after circulation leads and publishing frequencies were taken into account.

MCGLATHERY, DONALD G. (1993, January/February). Does title confusion affect magazine audience levels? *Journal of Advertising Research, 33*, 24–37.

Questions whether the audience measurement technique of screening determines the reading of specific titles. Three systems of estimating magazine readership are Recent

Reading, Through the Book, and the Frequency Technique. In all three, subjects are asked whether they had read or looked at an issue in the last 6 months. Title confusions were studied when people were given pairs of magazines titles similar in names or content. The read-to-circulation varied when similar titles were compared. In 10 pairs and 2 triplets, the disparity favored the smaller circulation titles except for 2. Title confusion occurred more among the infrequent or casual readers. A smaller circulation title usually benefits from the confusion.

III–13 Juvenile books and textbooks

GILLESPIE, CINDY S.; POWELL, JANET L.; CLEMENTS, NANCY E.; & SWEARINGEN, REBECCA A. (1994). A look at the Newbery Medal books from a multicultural perspective. *The Reading Teacher, 48*, 40–50.

Identifies the ethnicity of characters found in the 73 Newbery Medal books (1922–1994) and analyzes the characterization of the racial or ethnic group represented. Two characterization systems were used: classification of characters into ethnic groups and role of the characters in the story (main, minor, mentioned character). Books were analyzed and reported on by decades. In 90% of the books, white Anglo–Saxons appeared as main, minor, or mentioned characters; blacks, in 26%; American Indians and Alaskan Natives, in 19%; white non-Anglo–Saxons, in 18%; Hispanics, in 10%; and Asian–Pacific Islanders, in 10%.

BRADFORD, CLARE. (1994, December). "Along the road to learn": Children and adults in the picture books of John Burningham. *Children's Literature in Education, 25*, 203–211.

Investigates the interplay between child and adult in the picture books by John Burningham. From the reviews of several of his books, which span 3 decades, adults generally control children in the physical sense but have no power over their imaginative lives. Adults do not share children's urgency to learn, and most of them do not see the connection between learning and imagination. Most adults believe they know about learning and about reality and that children do not.

III–14 Censorship and freedom of the press

NOLL, ELIZABETH. (1994, December). The ripple effect of censorship: Silencing in the classroom. *English Journal, 83*, 59–64.

Solicited written comments from middle school, junior high school, and high school English teachers in seven states about threats of censorship. Nearly all have been questioned, challenged, or censored for their use of certain literature. Novels are challenged most often. Authors challenged most often were Shakespeare, Toni Morrison, Washington Irving, and Voltaire. Although some of the incidents originated outside the school, challenges also came from other teachers and administrators. The teachers themselves censor materials partly because of fear of pressure from others.

BODLE, JOHN V. (1994, Winter). Measuring the tie between funding and news control at student newspapers. *Journalism Quarterly, 71*, 905–913.

Surveys 233 advisers of college student newspapers to determine the extent to which administrators and advertisers attempt to influence news selection and content. The subjects completed a 7-page survey. Nearly two thirds (64.3%) reported that news selection was not strongly tied to administrative influence. Those at private institutions were significantly

more likely to conclude that such a relationship existed. Nearly half indicated they had been pressured by administrators or advertisers to publish or not to publish certain news items; fewer had complied. Two thirds believed that news selection is not tied to administrative funding. Advisers at 2-year colleges were twice as likely to be pressured or threatened with job dismissal as advisers at 4-year colleges. Only 5.7% of the advisers were asked by advertisers to withhold news items, but none complied. Chi-square was used to test data.

JENKINSON, DAVE. (1994, November/December). The changing faces of censorship in Manitoba's public school libraries. *Emergency Librarian*, *22*, 15–21.

Replicates an earlier study on library censorship in Manitoba, Canada, public schools. Results of the 2 studies were compared. A 4-page current questionnaire was completed by 72% of the 583 libraries. The rates of challenge have increased over a decade in both urban and rural schools. In the current study parents and guardians were overwhelmingly the initiators of the challenges; more than 171 book titles, 15 magazine titles, and 8 videos received at least 1 challenge. Fiction titles were challenged more often than nonfiction. The majority of titles in the present study were not challenged in the earlier study. The reasons for challenging were different. In the current study witchcraft, supernatural acts, and violence replaced profanity and explicit sex of the 1982–84 study. Differences in challenges between rural and urban schools were noted.

DILLON, KEN, & WILLIAMS, CLAIRE LOUISE. (1994, November/December). Censorship, children & school libraries in Australia: Issues of concern. *Emergency Librarian*, *22*, 8–14.

Questions 145 teachers, librarians, and graduate education students in Australia about policies for handling challenges to resources, personnel involved in handling the challenges, and postchallenges. The survey revealed that most challenges came from parents, but there was evidence of self-censorship by librarians and classroom teachers. The subjects reported 105 challenges to 102 resources, with fiction books receiving 64.7% of the challenges. Of these challenges, 66.7% were made on the grounds of morality, obscenity, and profanity. The largest single group involved in deciding the fate of challenged items included the principals, teachers, and librarians. Of the 102 resources challenged, 33 (32.3%) were retained and 68 (66.7%) were removed or restricted.

KOLODZIEJSKA, JADWIGA. (1995, March). Reading and libraries in Poland today: Between romantic traditionalism and the free market. *International Information & Library Review*, *27*, 47–57.

Discusses changes in the Polish state structure since 1989 and subsequent effects on the development of culture. Two of the changes were the abolition of censorship and permission of free enterprise in publishing. Censorship under the Polish Communists was applied to the contents of all kinds of information (cultural, economic, scientific, and technical). Between 1981 and 1989, more than 4,000 book and brochure titles and more than 2,000 periodicals were published without being submitted for censorship, not including those published by the clandestine press. The abolition of censorship in April 1990 permitted the rapid development of publishing, a wider range of titles, the emergence of local periodicals, and the importation of electronic equipment. The television monoculture has caused a decline in the use of print for informational and recreational purposes and has reduced the cultural differences between village and city residents. Librarians experienced difficulties after 1989 in dealing with a threatened disappearance of traditional culture because of use of mass media for entertainment.

GUNTHER, ALBERT C.; HONG, YAH-HUEI; & RODRIGUEZ, LULU. (1994, Autumn). Balancing trust in media and trust in government during political change in Taiwan. *Journalism Quarterly, 71*, 628–636.

Compares the credibility of broadcast media versus print media and between trust in media and trust in government in Taiwan after the government's ban on newspapers ceased. Data came from 453 adults in a random sample telephone survey in 1990. The same set of questions was used for the three television stations and four newspapers to determine the media considered more credible. Through the use of a Likert response scale, subjects indicated their perceptions of the relation of government and media. Television news, despite the control by government, was considered more credible. Those who were more conscious of diminishing control over media were more likely to dissociate the two institutions. Coefficients of correlation between trust in the press and trust in government were generally positive.

RAMPAL, KULDIP R. (1994, Autumn). Press and political liberalization in Taiwan. *Journalism Quarterly, 71*, 637–651.

Explores factors contributing to the emergence of political pluralism and the status of press freedom in Taiwan. Based on field research, the article notes that Confucian humanism, socioeconomic progress, and communication revolution have facilitated the democratization process and, therefore, freedom of press. The removal of two significant restraints formerly on the press in Taiwan resulted in a spirit of dynamism in the country's mass media that had not been present since the Republic of China moved to Taiwan in 1949. These restraints were a ban on the introduction of new newspapers and a limitation of the number of pages (12) for newspapers. Taiwan now has a vibrant press, but further improvements are needed in press law and media ownership patterns to secure a stronger framework for press freedom.

III–15 Effects of reading

ATWOOD, L. ERWIN. (1994, Summer). Illusions of media power: The third-person effect. *Journalism Quarterly, 71*, 269–281.

Assesses the third-person effect and its alternatives, first-person effect and equal-media effect, among adults following the prediction of a severe earthquake and after the earthquake failed to materialize. Data were collected in November 1990 and in February 1991 from residents in southeast Missouri. Telephone interviews were conducted with 526 individuals in November and followups completed with 293 individuals in February. Three effect groups were created for each medium (newspapers, television, and radio): first- and third-person effect and equal-media effect scores. Discriminant analyses were used to isolate differences in the three November effect groups and among individuals who did and who did not reassign media effects from November to February. The findings showed that both third-person and first-person effects resulted from downward social comparisons following from differences in belief in the message, accuracy of information about the predictability of earthquakes, and perception of the beliefs of others about the message. The media effects were interpreted as illusions people create to cope with a predicted disaster and later revise to reflect situational realities.

WALSH-CHILDERS, KIM. (1994, Winter). "A death in the family"—A case study of newspaper influence on health policy development. *Journalism Quarterly, 71*, 820–829.

Examines the impact of a series on infant mortality in the *Alabama Journal* in 1987. The case study included interviews with families and public health officials, the cost to the state, and the low priority given to infant mortality. Reprints were made of the stories, pho-

tos, and editorials and sent to 5,000 state opinion leaders. The series brought together a community-wide initiative to solve the problem. Pressure on governmental officials resulted. Factors that appeared to have affected the series' influence included expert agreement on solutions, supportive private citizen groups and public officials, Alabama's political situation, the newspaper's location in the capital city, widespread distribution of the reports, follow-up reports and editorials, and publicity received when the series won the Pulitzer Prize.

VERMEER, JAN P. (1995, Spring). Multiple newspapers and electoral competition: A county-level analysis. *Journalism & Mass Communication Quarterly, 72*, 98–105.

Hypothesizes that the presence of multiple newspapers in a county increases the competitiveness of election results in that county. Elections for the U.S. Senate and for governors in 111 counties in 39 states between 1986 and 1988 were examined. Each county containing a city of at least 100,000 was included. The number of newspapers published in each county was determined. Competitiveness was the dependent variable; social factors and political factors were the control variables. The effects in gubernatorial and U.S. Senatorial races and in reelection and open-seat contests are compared. The data supported the hypothesis. Pearson product-moment coefficient of correlation was used to test the data. It was concluded that the presence of more newspapers in a county leads to closer election outcomes in races for the U.S. Senate and for the governorship. The effect is somewhat stronger for U.S. Senatorial contests than in gubernatorial contests and is still stronger in open-seat campaigns than in those whose incumbents seek reelection.

MCLEOD, DOUGLAS M., & PERSE, ELIZABETH M. (1994, Summer). Direct and indirect effects of socioeconomic status on public affairs knowledge. *Journalism Quarterly, 71*, 433–442.

Investigates the impact of socioeconomic status, perceived utility indicators, and news media use on public affairs knowledge. A path analytic model was constructed to examine the linkages between socioeconomic status, perceived utility, media use, and public affairs knowledge. Telephone interviews were conducted with 480 adults. Analysis of linear structural relationships (LISREL) was used to conduct path analysis to test the model. The results showed strong support for the idea that socioeconomic status is central to the processes that lead to knowledge differences and is significantly related to perceived utility, media use, and public affairs knowledge. The newspaper as news source led to higher levels of public affairs knowledge.

III–16 Reaction to print

EVANS, RICK. (1993, July/September). Learning "schooled literacy": The literate life histories of mainstream student readers and writers. *Discourse Processes, 16*, 317–340.

Examines the autobiographical literate life histories of 65 college readers and writers. The purpose of the study was to explore students' own developing understandings of their actual experiences in reading and writing through their replies to three questionnaires (background information, reading autobiography, writing autobiography) and interviews. The findings suggest that the school context determines to a significant degree students' understandings of reading and writing as literate activities and of themselves as readers and writers. Their descriptions of their experiences in reading and writing changed from enjoyment of the activities to preparing assignments to please teachers. Their purpose became, as years passed, to please their teachers. Many of their earlier supportive experiences in literate lan-

guage competency are replaced by unpleasant and discouraging experiences. One student's literate autobiography is included in the report.

BASIL, MICHAEL D., & BROWN, WILLIAM J. (1994, Summer). Interpersonal communication in news diffusion: A study of "Magic" Johnson's announcement. *Journalism Quarterly, 71*, 305–320.

Presents the results of two news diffusion stories. The first analyzed the relation between the general importance of a news story and the degree to which people told it to others. A meta-analysis of the results of 34 studies from 1945 to 1990 was conducted. From a sample of 41 stories covering 28 news events, it was found that the general importance of the story was positively associated with the level of diffusion and the likelihood of hearing the news interpersonally but not the rate of telling others. The second study examined the spread of news of Magic Johnson's positive HIV test. The subjects were 391 university students who answered 67 questions. The results indicated that personal importance affected whether a person tells others about news. The findings of both studies indicated the important role of individuals and the importance of the news in the diffusion process.

RAUCH, MARGARET, & FILLENWORTH, CEIL. (1994). Evaluating marketing methods used by the academic learning center. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies: Eleventh yearbook* (pp. 48–57). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Surveys college students for marketing ideas for the on-campus academic learning center program, which provides reading courses and tutoring services. Students (n = 191) from two reading classes were asked about the effective methods for marketing the services provided by the academic learning center. Responses were divided into freshmen and upperclassmen for comparison purposes, although no differences were later revealed. Three items received low ratings from both groups: using humorous cartoons, personalizing information by writing students' names and addresses on the letters, and posting flyers on sidewalks and dormitory floors. Students strongly suggested that the phrase "free tutoring" be prominently displayed on the flyer or letter and that catchy slogans or questions be used in advertising. Suggestions for reaching off-campus students are discussed.

MOORE, DEWAYNE, & ZABRUCKY, KAREN. (1995, March). Adult age differences in comprehension and memory for computer-displayed and printed text. *Educational Gerontology, 21*, 139–150.

Compares younger and older adults' reading performance on texts presented on-line and those presented on a printed page. The 80 subjects (40 for each age group) were randomly assigned to the two methods. Four versions of each of four expository passages were used. One sentence was either consistent or inconsistent with the remainder of the 11-sentence paragraph and was either adjacent or nonadjacent with a target sentence. Subjects were tested individually and read the four experimental passages, each presented in one of four experimental conditions: consistent close, inconsistent close, consistent far, inconsistent far. Passages and conditions were counterbalanced across presentations order. Data were evaluated by 2 (age) × 2 (method) × 2 (consistency) × 2 (distance) mixed-factors ANOVA with repeated measures on the latter two factors. The younger adults spent less time reading and recalled more information than the older adults did. Age differences were not affected by method of presentation. Both groups showed superior comprehension and recall for on-line presentation. Subjects spent more time reading on-line texts than printed texts, but the extra time did not ac-

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count for superior comprehension and memory. The on-line participants were more likely to report inconsistencies than the printed-text group.

AUSTIN, ERICA WEINTRAUB, & DONG, QINGWEN. (1994, Winter). Source vs. content effects on judgments of news believability. *Journalism Quarterly*, *71*, 973–983.

Examines the extent to which the message content contributes independently and in combination with institutional level source reputation to predict believability judgments of specific news. A total of 516 college students participated in a between-groups 3 (source type) × 3 (message type) factorial experiment. Students read a fictitious news story and answered posttest questions assessing judgment of apparent reality of the stories and of source credibility of newspapers. Six stories were prepared for the study. Stories had been rated as easy to believe, innocuous, hard to believe, and sensational. Sources included the *New York Times* (reputable), the *Star* (disreputable), and a fictitious newspaper (ambiguous). ANOVA was used to test the hypotheses with hierarchical multiple regression to test possible curvilinear effects. The results show that a more innocuous message results in more positive judgments of believability, but the reputation of the source has no direct effect on believability judgments, nor does it interact with message type.

GRIFFIN, JEFFREY L., & STEVENSON, ROBERT L. (1994, Winter). The effectiveness of locator maps in increasing reader understanding of the geography of foreign news. *Journalism Quarterly*, *71*, 937–946.

Tests two techniques of providing contextual information in foreign news stories: the traditional method of weaving it into the text and that of including a map with the story. A *New York Times* story about a government crackdown in the southern region of Senegal was experimentally manipulated for use in the study. Answers to 8 geographical questions were woven into the text version and were visually discernible on the locator map. To test the influence of the two techniques a 2 × 2 randomized group, posttest only was designed. For the 2 factors of text and map, the values were present and absent. They were crossed to produce four conditions: text and map, text only, map only, neither. The dependent variable was subject response to 8 multiple-choice questions. Correct answers were summed to produce a single scale with a range of 0 to 8. For use as covariates, self-assessments of interest in world affairs were included. Measures of recent newspaper, network television, and news magazines were also covariates. The subjects were undergraduate students at 2 universities. The results showed that readers' understanding of geographical context of a foreign event can be increased by either procedure, but the most effective technique is using both approaches.

DAVIS, JOEL J. (1994, Summer). Environmental advertising: Norms and levels of advertiser trust. *Journalism Quarterly*, *71*, 330–345.

Measures the extent to which the public trusts advertisers who make environmental product claims. A nationally representative sample of 500 consumers were surveyed by mail (57% response) to determine if the demographic composition of the research sample agreed with that of the U.S. population. The most common or important advertiser behaviors were identified in environmental advertising and developed into eight cases that represented advertiser behavior. The subjects rated each case on a 7-point Likert-type scale to determine the extent to which they personally agreed or disagreed with the guideline presented in each case. There is an extremely low level of trust, as indicated by low levels of agreement between the public's norms and the environmental advertisers' norms. The percentage of subjects with a neutral opinion is very low. Chi-square and ANOVA were used to test the data. The public believes that advertisers are guided by norms much more liberal than their own norms.

III–17 Research techniques

JACKSON, SALLY; O'KEEFE, DANIEL J.; & BRASHERS, DALE E. (1994, Winter). The messages replication factor: Methods tailored to messages as objects of study. *Journalism Quarterly, 71*, 984–996.

States that the broad objective of this study is to develop an analytic approach that is tailored to the nature of messages and to their role in message effects experiments. The emphasis is on the replications factor in statistical analysis. Whether to treat these as fixed factors or as random factors hinges on what is assumed about the relation between abstract treatment contrasts and their concrete material implementation. Results of this study show that treating replications as random is recommended.

IV. Physiology and psychology of reading

IV–1 Physiology of reading

WILLIAMS, MARY C.; MAY, JAMES G.; SOLMAN, ROBERT; & ZHOU, HONG. (1995, January). The effects of spatial filtering and contrast reduction on visual search times in good and poor readers. *Vision Research, 35*, 285–291.

Employs spatial frequency filtering and contrast reduction in an effort to determine whether these factors contribute to improved reading comprehension in reading disabled children. Subjects included 26 children in grades 2–7 who were enrolled in a summer reading clinic. Children were screened on a battery of tests including visual tests, a gross test of neuropsychological functioning, the Kaufman Brief Intelligence Test, the WRMT-Revised, and the Nelson Reading Skills Test. Children scoring at or above grade level on the 2 reading tests were included in the normal group, and those scoring more than 1 year below grade level were included in the disabled reader test. Additionally, clinical diagnoses of children with attention deficit disorder (ADD) were obtained. Subjects were classified as good reader controls (CON), specific reading disabled (SRD), ADD, or comorbid SRD/ADD (COM) and were asked to perform a visual task. On a computer screen, letter arrays were spatially filtered to produce low-pass and high-pass images. In addition, a low-contrast control image was generated to match the low contrast of the high-pass image. With high contrast, unfiltered arrays, search times for the CON and ADD groups were much shorter than those for the COM and SRD groups. Both high-pass and low-pass filter conditions improved the search speed for the COM group; improvement for the SRD group was obtained with the low-contrast stimuli only.

TYRRELL, RUTH; HOLLAND, KEITH; DENNIS, DOUGLAS; & WILKINS, ARNOLD. (1995, February). Coloured overlays, visual discomfort, visual search and classroom reading. *Journal of Research in Reading, 18*, 10–23.

Explores the effect of colored overlays on the reading performance and eye movements of 60 British children, aged 8 to 16. The researchers used successive pair-wise comparisons to enable each child to choose the overlay combination that provided the greatest clarity. The 12 below-average readers (reading more than 1 year below CA) were more likely to choose a colored overlay and reported more perceptual difficulty on tasks in the *Scotopic Sensitivity Syndrome Screening Manual*. In separate sessions with and without the overlay of their choice, the children read for 15 minutes and performed a visual search task. The overlay had little effect on reading initially, but after approximately 10 minutes, the children who

chose a colored overlay read more slowly without the overlay than with it. These children reported more symptoms of visual discomfort and showed signs of tiring when they read without the overlay. The visual search performance of the children who chose a colored overlay was initially impaired but improved to normal levels when the overlay was used. Fourteen children serving as CA or RA matched controls undertook the reading and visual search tasks using a clear overlay with no effect on performance.

EVANS, BRUCE J.W.; COOK, ANNA; RICHARDS, IAN L.; & DRASDO, NEVILLE. (1994, October). Effect of pattern glare and colored overlays on a simulated-reading task in dyslexics and normal readers. *Optometry and Vision Science, 71,* 619–628.

Describes 2 experiments investigating aspects of the scotopic sensitivity syndrome or the Irlen syndrome. In particular, examined is the hypothesis of pattern glare as an explanation of the condition. Experiment 1 investigated the effect of colored overlays on performance at a simulated reading task while controlling for the placebo effect possibly associated with the use of colored overlays. Subjects (n = 151 optometry students) were given a photocopy of a pattern that should elicit pattern glare; a questionnaire asking about personal history of epilepsy, migraine, and headache; and instructions to view a grating for 10 seconds and then check on a list of 9 illusions any that they experienced when viewing the test grating. From the total group, 5 experimental subjects who had experienced the most pattern glare and 6 controls who had experienced the least pattern glare were selected. These subjects then viewed the same grating as previously viewed through a selection of different colored overlays and carried out 2 simulated reading visual search tasks with and without the filters. In all the subjects, pattern glare was marginally linked to the prevalence of headaches. For the second phase, the colored overlays were found to be of some help to the 5 subjects who experienced pattern glare. In Experiment 2, 39 dyslexic children were matched with 43 controls for age and IQ (WISC-R). Ages ranged from 7.6 to 12.3. They were tested for pattern glare in a manner similar to that in Experiment 1. The dyslexic group reported more pattern glare, but also reported more glare from a control stimulus. Pattern glare in the dyslexic group was significantly inversely correlated with flicker sensitivity (r = –0.39). The authors concluded that it appears unlikely that visual factors are, in most cases, a major cause of dyslexia.

HURLEY, SANDRA ROLLINS. (1994, July–September). Color vision deficits and literacy acquisition. *Reading Psychology, 15,* 155–163.

Proposes to demonstrate that color blindness inhibits literacy acquisition. A case study of a third grader with impaired color vision is presented, followed by a review of the literature. The child had total reading CTBS percentile scores in grades K, 1, 2, and 3 of 60, 23, 17, and 12, respectively. His estimated reading levels as determined by an IRI were independent, primer; instructional, 1; frustration, 2; listening, 4. His WISC-R full scale score was 81. Testing by an ophthalmologist revealed that he was severely color blind. He was unable to see what was written with yellow chalk on a green chalkboard and could not distinguish light blue lettering on a darker blue poster. Nor could he distinguish the words in the district adopted health test, which used black type on brown pages. The case study and the literature reviewed appeared to support the conclusion that there was some relation between color deficiency and learning and that individuals with color vision deficits are frequently not aware of the handicap.

FALLONE, ANTHONY R., & BALUCH, BAHMAN. (1993, December). Eye colour: An unconsidered variable in cognitive research. *Perceptual and Motor Skills, 77,* 1123–1127.

Examines the issue of eye color as it affects reaction time for various levels of cognitive tasks. Subjects included 157 undergraduate students at the University of Edinburgh, Scotland; 78 had dark color eyes and 79 had light color eyes. The task consisted of a word-

recognition test presented on a microcomputer screen. Ease of word recognition was varied with response decision, using a within subjects design. The cue word *same* or *different* was presented on the screen for about one second, then a 6 × 4 matrix containing the target words *left* or *right* was displayed. The matrix contained high- and low-discriminability conditions. If the cue word was *same*, subjects were to press the button that was the same as the target word; if the cue word was *opposite*, they were to press the opposite button to the target word. Significant differences were found in reaction time favoring dark-eyed subjects.

PRICE, C.J.; WISE, R.J.S.; WATSON, J.D.G.; PATTERSON, K.; HOWARD, D.; & FRACKOWIAK, R.S.J. (1994, December). Brain activity during reading: The effects of exposure duration and task. *Brain*, *117*, 1255–1269.

Aims to account for the differing results of 2 previous positron emission tomographic (PET) studies on brain activity during reading by examining systematically the type of reading task and the exposure duration of the word stimuli. Two experiments are reported, each with 6 adult male volunteer subjects. Three types of tasks were presented: reading aloud, reading silently, and lexical decision on visually presented words and pseudowords. Both experiments presented single words or strings of false font. In Experiment 1, responses were articulated in both the word and false font conditions, with subjects reading real words aloud or verbally making lexical decisions on real words and pseudowords. In Experiment 2, subjects viewed the words and false font silently. Both oral and silent reading engaged the left middle and superior temporal regions. The areas primarily engaged during lexical decision were the left inferior and middle frontal cortices and the supplementary motor area. It is felt that activity in these areas suggests that the subjects were using a phonological strategy to perform the tasks. In addition, there was a significant effect of exposure duration, with activity being greater for short exposure durations than for long exposure durations.

ACKERMAN, PEGGY T.; DYKMAN, ROSCOE A.; OGLESBY, D. MICHAEL; & NEWTON, JOSEPH E.O. (1995, May). EEG power spectra of dysphonetic and nondysphonetic poor readers. *Brain and Language*, *49*, 140–152.

Contrasts 2 subtypes of poor readers, dysphonetic and phonetic, and a control group of ADD children on EEG spectral values obtained during silent reading of letters and easy words. Subjects were first assigned to 2 groups, poor readers or ADD only, based on WISC-R and WRAT-R scores. The 56 ADD-only children were average or better readers and spellers on the WRAT-R. Poor readers were identified as dysphonetic or phonetic on the basis of performance on the Decoding Skills Test. During EEG procedures, children viewed and read silently 5 types of word strings and 2 types of letter strings on a color monitor screen: orthographically similar rhyming words, orthographically dissimilar rhyming words, orthographically similar nonrhyming words, dissimilar words, semantically similar words, phonemically confusable letters, and phonemically nonconfusing letters. ANOVA procedures were used in the analyses. EEG spectral data discriminated poor readers from normal ADD readers as well as dysphonetic poor readers from phonetic poor readers. Dysphonetics had greater power in the delta and theta bands than did phonetic readers. The findings are interpreted as indicating that dysphonetics in particular were less actively engaged in the reading task than the other groups.

CORNELISSEN, PIERS; RICHARDSON, ALEX; MASON, ALEXANDRA; FOWLER, SUE; & STEIN, JOHN. (1995, May). Contrast sensitivity and coherent motion detection measured at photopic luminance levels in dyslexics and controls. *Vision Research*, *35*, 1483–1494.

Carries out 3 experiments to explore differences between developmental dyslexics and controls in the ability to perform low-level visual tasks. Experiment 1 employed 14 reading disabled children and 14 CA and IQ matched controls and tested whether dyslexics' re-

duced luminance contrast sensitivity persisted under photopic conditions. Children viewed a display on a computer screen with the stimulus contrast systematically reduced. For Experiment 2 there were 29 reading disabled children and 29 normally reading controls selected from a primary school. Again, subjects were matched for CA and IQ. The ability to detect coherent motion was assessed. Experiment 3 included 29 dyslexic adults and 29 controls. Motion coherence thresholds of the 2 groups were compared. Negligible differences were found between dyslexic and control children when they viewed static gratings in the photopic luminance range or when they viewed photopic counterphase modulated stimuli. Dyslexics were significantly less sensitive to motion than were controls. Findings with adults provided support for the thesis that poor motion detection could be causally related to poor reading in dyslexics. The authors posit that a visual magnocellular (M pathway) deficit could affect some dyslexics.

KINSLER, VERONICA, & CARPENTER, R.H.S. (1995, May). Saccadic eye movements while reading music. *Vision Research, 35*, 1447–1458.

Measures eye movements of subjects as they read and perform lines of music consisting of rhythmic information only, in conventional musical notation. Four subjects, all musicians, were presented with a line of notes on a computer screen and were to tap the corresponding rhythm on a microphone. A second computer recorded the output of the microphone and the eye movements. Results showed that the eyes do not simply fixate once on every note, nor in a simple relation to the beat. The relation between the spatial pattern of the notes displayed and the eye fixations made was stochastic and similar to that in ordinary reading, but with a tendency to fixate salient details of the notation (notes and barlines) as opposed to the spaces in between. Shorter notes were less likely to be fixated than longer ones, but this was determined by their performance length rather than their visual appearance. As the tempo of performance of a given piece of music is increased, the average time between saccades decreases but their mean amplitude increases. At slow speeds with complex sequences there were sometimes more saccades than notes; with a fast speed and simple pattern, there were sometimes more notes than eye movements.

MCCONKIE, GEORGE W.; KERR, PAUL W.; REDDIX, MICHAEL D.; ZOLA, DAVID; & JACOBS, ARTHUR M. (1989, September). Eye movement control during reading: II. Frequency of refixating a word. *Perception & Psychology, 46*, 245–253.

Studies characteristics associated with word refixation. Data were drawn from an earlier study by three of the authors. Subjects were 66 college students reading two chapters of a novel presented on a computer screen. The data used for this study consisted of lines read without error and contained 43,668 eye fixations. Results confirm the existence of a word refixation curve wherein the frequency of refixating on a word increases as the distance of the first fixation from the center of the word increases. If the initial fixation is near the center of the word, the frequency of making a second fixation is minimized. The data are described in terms of a parabolic function. The effects of word length and word frequency on the shape of the curve are also reported.

KLEIN, RAYMOND; BERRY, GLEN; BRIAND, KEVIN; D'ENTREMONT, BARBARA; & FARMER, MARY. (1990, June). Letter identification declines with increasing retinal eccentricity at the same rate for normal and dyslexic readers. *Perception & Psychophysics, 47*, 601–606.

Investigates the hypothesis that retinal acuity or eccentricity varies with and possibly causes differences in reading levels. In the first of 2 experiments, subjects were 14 undergraduate students who were categorized as either good or poor readers based on their scores on the NDRT. Stimuli consisted of 10 uppercase letters displayed in any one of 16 positions around a

fixation cross located in the center of a computer screen. After practice, subjects participated in 80 trials in which the target letter, response, target position, and eccentricity were recorded. Results of an ANOVA indicated significant effects of eccentricity and direction but no interaction effect between eccentricity and reading level. Experiment 2 was designed to confirm or disconfirm the results of Experiment 1 by comparing them with the performance of dyslexic high school students on the same task. Results of the second experiment confirm the results of the first experiment, suggesting that there are no differences between good readers and poor readers or dyslexics in picking up peripheral information about letter identity.

FISCHER, BURKHART; BISCALDI, MONICA; & PETRA, OTTO. (1993, September). Saccadic eye movements of dyslexic adult subjects. *Neuropsychologia, 31*, 887–906.

Compares the characteristics of visually guided eye movements in dyslexic and nondyslexic adults. Subjects were 12 adults of normal intelligence (controls) and 12 adults of normal intelligence with problems in reading and writing. The subjects with problems in reading and writing were divided into two groups based on the severity of the problems. Subjects were given 5 tasks, 2 single saccade tasks and 3 sequential saccade tasks. The 2 single saccade tasks consisted of a gap test and an overlap test; the 3 sequential saccade tasks consisted of an overlap sequence task, a synchronous sequence task, and a simultaneous sequence task. A corneal infrared light reflection method was used to measure eye movements. Student *t* tests were used to compare groups along 7 dimensions. Results indicate that the eye movements of the 2 test groups deviated differently from the eye movements of the control groups. The dimensions on which they differed in the single target task were consistency of target acquisition, saccadic reaction time, and number of anticipatory responses. In the sequential tasks, the dimensions of difference were amplitude, number of saccades, and fixation durations.

YAP, REGINA L., & VAN DER LEIJ, ARYAN. (1994, December). Testing the automatization deficit hypothesis of dyslexia via a dual-task paradigm. *Journal of Learning Disabilities, 27*, 660–665.

Tests the hypothesis that dyslexia is caused by an automatization deficit. Subjects were 14 dyslexic children with a mean age of 10.1, one control group of 14 first grade nondisabled readers (RA matched) and one control group of 14 nondisabled fifth graders (CA matched). All were from the Netherlands. Subjects were given a motor balance task as the primary task with an auditory-choice reaction task as secondary. Primary and secondary tasks were given in isolation and in combination. Motor balance skills of the dyslexic pupils were similar to those of the CA group in the single task condition. Dyslexics made significantly more balance errors in the dual task condition than in the single task condition, while control groups did not show the difference. In the dual task condition, motor balance skills of dyslexics differed significantly from CA controls on the right leg where skills dropped to the level of the RA group.

LIGHT, JACQUELYN GILLIS, & DEFRIES, JOHN C. (1995, February). Comorbidity of reading and mathematics disabilities: Genetic and environmental etiologies. *Journal of Learning Disabilities, 28*, 96–106.

Assesses the extent to which comorbidity between reading and mathematics deficits is due to genetic and environmental influences. Batteries of reading and mathematics tests, as well as psychometric measures, were administered to pairs of twins (149 identical and 111 fraternal) in which at least one member of the pair had a reading disability. All twins ranged in age from 8 to 20 years at the time of testing. A discriminant function reading score was computed for each individual, employing discriminant weights estimated from an analysis of PIAT reading recognition, reading comprehension, and spelling data obtained from an independent sample of 140 nontwin children with diagnosed reading problems and of 140 controls.

A composite mathematics score was computed by adding standardized scores on the PIAT mathematics and WISC-R arithmetic subtests. Data were subjected to a cross-concordance analysis and also fitted to a bivariate extension of the basic multiple regression model for the analysis of selected twin data. A comparison sample of control twin pairs, matched by gender, age, and school district, was also tested. Neither member of the control pair had a history of reading problems in school. Results of these analyses suggest that genetic and shared-environmental influences contribute to the observed covariance between reading and mathematics deficits.

INHOFF, ALBRECHT WERNER. (1989, August). Lexical access during eye fixations in reading: Are word access codes used to integrate lexical information across interword fixations? *Journal of Memory and Language, 28*, 444–461.

Obtains eye fixation records during reading to test whether lexical access of a word is distributed across successive interword fixations. Subjects were 16 university students who viewed sentences displayed on a computer screen. Eye movements were monitored by the computer to determine if the eye was in a saccade or a fixation; sequence, location, and duration of each fixation were recorded. Subjects read sentences under four viewing conditions: no preview condition (currently fixated word was visible during each fixation, but no preview of the to-be-fixated parafoveal word was provided), 3-letter preview condition (currently fixated word plus the beginning 3 letters of the parafoveal were available during each fixation), 4-letter preview condition, and whole word preview condition. Materials consisted of 96 simple declarative sentences, each containing a 6-letter target word taken from three different word classes: bimorphemic compound (cowboy, teacup); monomorphemic pseudocompound words (carpet, napkin); and monomorphemic 6-letter control words, which were not structurally similar to compound words (mirror, bubble). The three types of target words were matched on word frequency. Three types of dependent measures were of interest: first fixations, single fixations, and gaze durations. ANOVA procedures were used in analyzing data. Findings indicated that parafoveal preview benefits from 3- and 4-letter sequences were unaffected by the linguistic status of previewed letters, suggesting that word access codes are not used to integrate lexical information across interword fixations. The effects of linguistic status were found for parafoveal previews of whole words. Preview benefits were greatest for pseudocompound words, which comprised high-frequency beginning and ending subword constituents, and smallest for control words, which did not contain subword constituents with lexical representations.

INHOFF, ALBRECHT WERNER. (1989, August). Parafoveal processing of words and saccade computation during eye fixations in reading. *Journal of Experimental Psychology: Human Perception and Performance, 15*, 544–555.

Studies parafoveal word processing during eye fixations in reading in order to determine: (1) Is the processing of parafoveally available words limited to the identification of beginning letters? (2) Does the parafoveal processing of words affect the following interword saccade? Three experiments are reported, with the same 16 undergraduate students acting as subjects in the first 2 and 8 skilled readers participating in the third. Subjects viewed 192 sentences displayed on a screen, each containing a 6-letter bisyllabic target word. Half of the sentences were read left to right and half, right to left. First fixation duration, saccade size, and all fixation positions were measured. Reading afforded either no parafoveal preview, preview of beginning trigrams, preview of ending trigrams, or preview of the whole parafoveal word. Previews were controlled by substituting x's or dissimilar letters for the original letters. Findings showed that preview benefits were greater for the whole word previews than for beginning and ending trigram previews. Saccades were larger for whole word previews than

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for no previews. Results are interpreted as supporting a Logogen-type model of word recognition and a model of saccade computation that posits a time-locked functional relation between the acquisition of parafoveal word information and the positioning of each fixation.

ANNETT, MARIAN. (1992, January). Phonological processing and right minus left hand skill. *Quarterly Journal of Experimental Psychology, 44A*, 33–46.

Examines, in 2 experiments, the relation between hand skill and phonological processing ability. Experiment 1 involved 25 boys and 30 girls, ages 5 to 8, with normal abilities. All of the subjects were individually assessed for hand skill and for rhyme judgment. Repeated measures MANOVA revealed that, in comparison to children with good rhyming ability, those with poor rhyming ability had a smaller difference between hands in hand skills. Comparisons for hand preference were not significant. Experiment 2 involved 75 boys and 88 girls between the ages of 9 and 11. Group testing measures of hand skill, word order memory, and homophone comprehension were administered; and measures of educational attainment and reading comprehension were made available by the school district. Findings of MANOVA and ANOVA procedures applied to the data produced further evidence of poorer phonological processing by children with small mean differences between hands in hand skills. Rhyme judgments and word memory, but not hand skill, were associated with reading achievement. Homophone error rates did not discriminate between hand skill groups. Both experiments revealed that children with hand skill differences favoring the left hand tended to be poorer in phonological processing.

IV–2 Sex differences

DAVIES, BRONWYN. (1993). *Shards of glass: Children reading and writing beyond gendered identities*. Cresskill, NJ: Hampton Press.

Explores the processes through which sex roles are established and maintained during childhood. Included as subjects are children from a previous study who were followed as well as three study groups of fifth and sixth grade primary children from three schools in Australia who were met with over a period of 12 months. Each of the groups consisted of 6 or 7 children who met with an adult for about 1 1/2 hours per week. Children were invited to talk about their ideas and beliefs about gender. The groups examined pictures of children in different cultures and at different times and shared information about childhood in different cultures and times. Groups looked at a variety of texts to detail the ways in which gender is constituted through text. The children brought in photos of themselves and discussed and wrote stories about them. They were introduced to written text and to the idea of reading those texts in the way that they had read the photographs, using the concept of positioning the reader within the text. Stories were discussed in terms of the children's own reading of them and their own physical and emotional responses to the stories. Readings of traditional stories were followed by readings of feminist stories. One chapter deals specifically with how narrative plays a part in establishing and maintaining the dominant social relations of the teacher and textual authority. Another chapter explores the ways in which children become aware of the process of interweaving life and textual fictions, deconstructing the text, and then reconstructing it based on new understandings.

CUMMINGS, REBECCA. (1994). 11th graders view gender differences in reading and math. *Journal of Reading, 38*, 196–199.

Reports data from a local writing assessment administered to 11th grade rural Maine students after the Maine Educational Assessment test scores indicated significant gender dif-

ferences in math and reading test scores. Students wrote in their humanities class, and papers were scored holistically using the scoring rubric from the state assessment scale. Each paper was rated twice, with randomly selected papers read a third time. Students were asked to give their reasons for the higher scores in reading by females and the higher scores in math by males. Responses clustered into categories: the way things are, work or career influences, societal beliefs, and school instructional practices. Students also included suggestions for change, many directed toward changes schools and teachers could make to balance the differences.

ROIG, MIGUEL, & RYAN, ROBERT. (1993, December). Hemisphericity style, sex, and performance on a letter-detection task. *Perceptual and Motor Skills, 77*, 831–834.

Investigates whether the type of strategy used during a reading task is mediated by the individual's preferred hemisphericity as determined by the Preference Questionnaire (PQ). Subjects—128 undergraduates, 55 men and 73 women—read a passage, circling every t they encountered in the words. Scores on the PQ suggested 58 of the undergraduates were right-style scorers and 64 were left-style scorers. No significant differences were found for hemisphericity; women, however, detected a higher proportion of t's than did men on total scores and on a subset of unsounded t's. Similar results were found when other subsets of the data were analyzed. The researchers suggest that hemisphericity style is not an important factor in letter detection during reading.

HOUSE, J. DANIEL, & WOHLT, VICTORIA. (1992, June). Tutoring outcomes of academically underprepared adolescent minority students as a function of student and tutor characteristics. *Journal of Genetic Psychology, 153*, 225–227.

Determines whether academically underprepared adolescent minority freshmen and sophomore university students earn higher grades when working with same-sex and same-race tutors. Students, 129 female and 61 male, were African American (142), Hispanic (27), and Asian American (21). Tutors were 34 males and 32 females who were white (41), Asian American (11), African American (9), and Hispanic (5). Tutors (juniors, seniors, and graduate students) were randomly paired with minority students. Grades were recorded, as were number of tutoring sessions each student attended. There was a significant coefficient of correlation between the number of tutoring sessions attended and the grades earned for both males and females. No significant main effects were found for either student sex or student ethnic group, and there was no significant interaction between sex and ethnic group. Male and female tutors were equally effective for students of all 3 ethnic groups. There was a significant student sex by teacher sex interaction, suggesting that students earned higher grades when working with same-sex tutors.

JEREMIAH, MILFORD A. (1994). Gender differences in vocabulary production. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies: Eleventh yearbook* (pp. 41–47). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Examines differences found in the use of selected words in sentences constructed by male and female college students. Approximately 200 sentences written by college freshmen in a developmental reading/study skills class served as the unit of analysis. Students wrote sentences for 6 high-frequency words; only sentences considered contextually correct were analyzed for the main topic or idea that was conveyed. Hence, classification categories varied depending on the word stimulus. The author states that gender was the most critical variable governing the types of sentences produced for certain words. For example, the word *belligerent* was used by males relative to war and violence, whereas females described social

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interactions illustrating the word meaning. Sentences constructed for other words, such as *equitable*, could not be categorized as gender specific.

GEER, JAMES H.; JUDICE, SANDRA; & JACKSON, SHERYL. (1994, October). Reading times for erotic material: The pause to reflect. *Journal of General Psychology, 121*, 345–352.

Compares reading times for romantic, erotic, and neutral sentences for 35 male and 34 female undergraduate psychology students and studies the relation of reading times with scores on the Sexual Opinion Survey (SOS) as well as the effect of sentence category and subject gender on reading time and accuracy. Subjects read a 73-sentence story including each sentence type and presented 1 sentence at a time on a computer terminal. Reading times for each sentence were computed. Following the reading of the entire narrative, participants were asked to write as much of the story as they could recall and were then given a 36-sentence recognition task containing 18 sentences that had appeared in the narrative, 6 of each type, and 18 distractor sentences. Reading times for erotic sentences were significantly longer than for either of the other 2 categories. Times for romantic and neutral sentences did not differ from each other. Males read more slowly than females, although the difference missed acceptable levels of statistical significance. Subjects with higher SOS scores had longer reading times. Recognition accuracy scores were greater for the neutral sentences than for the other 2 categories, with females being more accurate than males. However, males were more accurate than females on recognition of erotic sentences.

IV–3 Intellectual abilities and reading

GRAY, JEFFREY W.; DAVIS, BRANDON; MCCOY, KENNETH; DEAN, RAYMOND S.; & JOY, KENNETH L. (1992, Fall). Mothers' self-reports of perinatal information as predictors of school achievement. *Journal of School Psychology, 30*, 233–243.

Examines the relation between perinatal events and school achievement for 134 children ranging in ages 8 to 16 to determine to what extent perinatal information alone and in combination with WISC-R subtests could be used to predict achievement. Data from the Maternal Perinatal Scale, the WISC-R, and WRAT were scored following standard procedures. Three separate multiple regression analyses were calculated entering perinatal factors into the equation before scores on the WISC-R subtests. Significant perinatal factors for reading were gestational age and labor. When both perinatal information and WISC-R scores were entered into the prediction, tests associated with general information, vocabulary skills, and attention were the best predictors of WRAT reading scores. Mother's obstetric history and morphological contribution were the most important variables in predicting arithmetic performance. Addition of the WISC-R vocabulary subtest score added significantly to the prediction of math performance. Some of the variability in spelling could be accounted for by gestational age and psychosocial events. When perinatal variables and intellectual information were included in the equation, a larger proportion of variance in spelling was explained, suggesting that remote memory for general information and attention are important spelling predictors. Overall, 92% of the variability in children's achievement could be accounted for by perinatal factors in combination with scores on WISC-R subtests.

HANNAH, C. LYNNE, & SHORE, BRUCE M. (1995, Spring). Metacognition and high intellectual insights from the study of learning-disabled gifted students. *Gifted Child Quarterly, 39*, 95–109.

Examines the relation between metacognition and giftedness in students with and without learning disabilities. Subjects were 48 school-identified learning-disabled gifted, gift-

ed, learning-disabled, and average-performing Caucasian boys at the elementary (grades 5 and 6) and secondary (grades 11 and 12) levels. Subjects were assessed in four areas: metacognitive knowledge about reading, metacognitive skills, detection of errors (violations of prior knowledge embedded in a passage and internal inconsistencies in a passage), and passage comprehension. Subjects' prior knowledge of the main idea of the stimulus text passage was also assessed. The design of the study was a 2 × 2 × 2 MANCOVA with grade, giftedness (identified or not identified), and learning disabilities (identified or not identified) serving as the independent variables and prior knowledge as the covariate. The results indicate differences in the use of metacognitive strategies between children identified as gifted and those identified as nongifted at the elementary level but not at the secondary level.

GLEZ, JUAN E. JIMÉNEZ, & LÓPEZ, MERCEDES RODRIGO. (1994, March). Is it true that the differences in reading performance between students with and without LD cannot be explained by IQ? *Journal of Learning Disabilities*, *27*, 155–163.

Determines whether IQ can explain the differences in reading performance between children with learning disabilities (LD) and children without learning disabilities (NLD). Subjects were 133 pupils in grades 6–8, who came from urban, average SES areas in Spain, and were classified into 4 IQ groups based on their WISC-R scores and into 2 reading groups (LD and NLD) based on their performance on the Test de Analisis de Lectoescritura. Each subject was presented with 192 stimuli, 96 words and 96 pseudowords, on a computer screen. The words and pseudowords were each grouped in 6 ways, which allowed for all combinations of word length (long, short), word familiarity (high, low), and positional syllabic frequency (high, low). The time needed for subjects to determine whether the word was a word or a pseudoword was measured. Results of a repeated measures ANOVA showed that high IQ pupils performed significantly better than low IQ pupils and that NLD children performed significantly better than LD children. Significant main effects were found for word length and familiarity, and significant interaction effects were found for length and familiarity as well as familiarity and positional syllabic frequency. Results of *t* tests reveal that LD children were more influenced by length and frequency for words and by length and positional syllabic frequency for pseudowords than were NLD children. The authors conclude that the differences in word recognition between LD and NLD pupils cannot be explained by IQ, as measured by the WISC-R.

LEATHER, CATHY V., & HENRY, LUCY A. (1994, August). Working memory span and phonological awareness tasks as predictors of early reading ability. *Journal of Experimental Child Psychology*, *58*, 88–111.

Assesses the relation among complex memory span, simple memory span, phonological awareness, and early reading ability. Seventy-one 7-year-olds from 5 primary schools in Oxfordshire, England, participated as subjects. Subjects were individually administered 2 complex span tasks, 2 simple span tasks, and 4 phonological awareness tasks. The relations and predictive value of each of the tasks to reading accuracy, reading comprehension, and arithmetic were determined through correlation and multiple regression analyses. Findings showed that 3 of 4 of the phonological awareness tasks were highly correlated with one another as well as with both complex span tests. Phonological awareness and reading related complex span scores accounted for significant portions of unique and shared variance in reading accuracy, reading comprehension, and arithmetic abilities. Arithmetic-related complex span scores related significantly only to arithmetic performance. Simple span scores related to the 3 cognitive abilities only when entered first into the hierarchical regression equation.

IV–4 Modes of learning

MOORE, PHILLIP J., & SCHOFIELD, NEVILLE J. (1994). Metacognitive instruction in map reading. *Educational Psychology, 14*(3), 259–268.

Assesses the effects of a military-based training program fostering the use of metacognitive strategies in topographical map reading in the classroom and in the actual field. Initial participants were 125 infantrymen, randomly assigned to an experimental or a control group. There were 64 experimentals and 61 controls at the completion of the classroom-based component of the study, and 21 experimentals and 21 controls at the completion of the field-based component. Subjects were classified as high or low in spatial ability according to performance on the Surface Development Test from the Kit of Factor Referenced Cognitive Tests. The experimentals received 150 minutes of instruction using 3-dimensional maps and reciprocal teaching procedures that centered on the development of wide observation, focusing attention, talking associations between topographical features, map inspection, and checking for correctness. Controls received traditional instruction that focused on the use of map scales distance measuring and grid referencing. Speed and accuracy data from map reading assessments administered at the completion of the classroom phase and in the field were submitted to chi-square tests. Findings pertaining to the classroom phase showed experimentals were superior to controls in accuracy of location but not in speed. Field test performance by experimentals, though slow in speed, tended to be more accurate than that of the controls.

IV–5 Experiments in learning

GALLINI, JOAN K.; SEAMAN, MICHAEL A.; & TERRY, SUZANNE. (1995, June). Metaphors and learning new text. *Journal of Reading Behavior, 27*, 187–199.

Investigates the influence of metaphors on processing new texts. Subjects, 62 graduate students, were randomly assigned to one of three conditions: (1) an advance metaphor condition, where the entire metaphor was present in an analog passage preceding the target passage; (2) the embedded extended metaphor condition, where there was an explicit mapping between content from the metaphor and the target; and (3) a control condition. Subjects read their passage without time restrictions and then completed an immediate and delayed free-recall test summarizing content and an objective comprehension test. Recalls were analyzed in terms of idea units, with idea units categorized into main and minor ideas and metaphoric-linked and nonlinked ideas. Responses to the multiple-choice and completion test items were scored as correct or incorrect. No significant differences were found in general comprehension or in number of ideas recalled. No significant differences were found over time. There was a significant effect for the time by group interaction, with recall increasing for the advance metaphor group over time. Both types of ideas by group interaction were significant, with the 2 metaphor groups recalling more ideas than the control group. Differences between the 2 metaphor groups were not significant. Metaphors seemed to alter text retention patterns in the direction of linked and main ideas, suggesting that metaphors can be used to increase learning of selected text materials.

HAENGGI, DIETER; KINTSCH, WALTER; & GERNSBACHER, MORTON ANN. (1995, March/April). Spatial situation models and text comprehension. *Discourse Processes, 19*, 173–199.

Conducts 3 experiments examining how readers inferred spatial information that was relevant to a story character's movements through a previously memorized layout of a fictional building relative to various tasks. In all 3 experiments, subjects were 40 university un-

dergraduates who received course credit for participating. In Experiment 1, subjects learned the spatial layout of a castle and read stories about characters moving within it and then completed the reading comprehension, the card rotation, and the cube comparison tests. Probed objects were recognized more quickly when the objects were located in the same room of a building as the main character of a narrative than when the objects were located in different rooms. Experiment 2 ruled out a simple name-based priming explanation of the spatial separation effect. Experiment 3 demonstrated a facilitation for objects from the character's target room even when readers were provided with a spatially indeterminate list description of the building. Results were interpreted as indicating that readers draw spatial inferences to update their situation models during comprehension of narrative texts.

LEWANDOWSKI, LAWRENCE; WATERMAN, BETSY B.; & RATHBONE, ELIZABETH A. (1995, April). Self-referencing in poor and good readers' recall. *Perceptual and Motor Skills*, *80*, 627–630.

Determines whether the inclusion of a pupil's name in a reading passage (self-referencing) improves recall of information from the passage. Subjects, 17 poor readers and 14 good readers ranging in age from 10 to 13, read 6 short passages and recalled information when 3 of the passages contained repetitions of the pupils' names and 3 contained generic names. Both good and poor readers recalled more information when their own names were included in the paragraphs than when names included were generic.

MCKOON, GAIL, & RATCLIFF, ROGER. (1992, July). Inference during reading. *Psychological Review*, *99*, 440–446.

Introduces the minimalist hypothesis suggesting that inferences are processed automatically only when information is easily available in the text. Such information includes general knowledge, explicit statements, or statements required to make text locally coherent. The minimalist hypothesis is offered by way of comparison to views arguing that global inferences (fully representative of text described situations) are automatically constructable. Support for the minimalist position is offered through a review of several studies and four similarly designed experiments investigating inferencing that stems from reading text differing in type (simplistic and natural) and length. Using both on-line and delayed procedures, ANOVA results from the four experiments yielded no evidence that global inferences are automatically constructed.

GALLINI, JOAN K., & SPIRES, HILLER. (1995, January–March). Macro-based, micro-based, and combined strategies in text processing. *Reading Psychology*, *16*, 21–41.

Examines the impact of macro-based (emphasis on schematic maps of the text content), micro-based (emphasis on connectives and anaphoric relations), and combined macro- and micro-based strategies on learning from text. The 71 undergraduates who served as subjects were enrolled in a university developmental reading class. Subjects were randomly assigned to one of four groups: macrostrategy, microstrategy, combined strategies, or a control group. Each group read the same passage, but each was provided different text supplements. Students in the macro condition received a hierarchical schematic map. Subjects in the micro condition received their passage marked with lines to show antecedents, referents, and connectives. Both an immediate free-recall test and an objective knowledge-based comprehension test followed the reading. Overall, the students receiving only the macro-based strategy performed better on both tasks. The combined strategy group, which received both the macro- and micro-based prompts, did not demonstrate significant benefits.

McDOUGALL, SINE; HULME, CHARLES; ELLIS, ANDREW; & MONK, ANDREW. (1994, August). Learning to read: The role of short-term memory and phonological skills. *Journal of Experimental Child Psychology, 58,* 112–133.

Examines the relation among reading, phonological skills, and short-term memory, and the processes producing short-term memory differences in good, average, and poor readers. Subjects were 69 children between the ages of 7.6 and 9.6 years. Each child was assigned to one of three reading groups based on performance on the British Ability Scales Word Reading Test. Measured also was each child's memory span for words (verbal short-term memory), memory span for abstract words (visual short-term memory), phonemic awareness (rhyme recognition), and phonemic deletion ability. Accounting for the IQ of each child, ANCOVA and regression analyses revealed good, average, and poor readers differed in verbal but not visual short-term memory. Verbal differences could be accounted for by differences in speech rates between groups. Good, average, and poor readers also differed in rhyme recognition and phonemic deletion ability.

SWANSON, H. LEE, & TRAHAN, MARCILLE F. (1992). Learning disabled readers' comprehension of computer mediated text: The influence of working memory, metacognition and attribution. *Learning Disabilities Research & Practice, 7,* 74–86.

Assesses the impact of computer mediated text on text comprehension of LD and average readers and attempts to identify cognitive variables involved in the treatment effects. The sample included 40 children from each of grades 4, 5, and 6, selected randomly from 12 schools; half were LD and half were average readers (CTBS) in the same schools as the LD pupils. Within ability group and grade level, children were assigned randomly to 1 of 4 treatment conditions: control, printed off-line (paper), and 2 computer mediated presentations. Subjects read 4 passages (2 traditional and 2 cloze) at each of 3 difficulty levels (grade level 2 to 3, grade level 4 to 5, and grade level 7 to 8). Pre- and posttest measures consisted of a metacognitive and attribution questionnaire, the Nelson Reading Skills Test (NRST), and the Working Memory Span Test. Subjects in the paper condition read the same text as in the computer conditions. They were not allowed to reread passages and answered 6 comprehension questions relating to each passage or 16 to 20 cloze completion items. The 2 computer treatment conditions included (1) computer presentation with no optional rereading, and (2) computer rereading in which children were directed to reread all or portions of the passages before answering comprehension items or cloze fill-ins. Treatment occurred over a 3-week period with 1 session per week. Percentage of comprehension questions correctly answered at each level of difficulty was analyzed using ANOVA and ANCOVA procedures. LD subjects scored lower than average readers on all measures and in all conditions. Treatment effects in favor of the computer presentations were found for average readers on the word meaning subtests of the NRST. For LD children, word meaning scores were better in the paper presentation condition than in the computer mediated condition. Attribution and metacognitive scores were independent of treatment effects. Only working memory was associated with performance on computer mediated text presentations.

LEE-SAMMONS, WILLIAM H., & WHITNEY, PAUL. (1991, November). Reading perspectives and memory for text: An individual differences analysis. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 17,* 1074–1081.

Examines, in 2 experiments, individual differences in how reading perspectives are used and their effects on text memory. In Experiment 1, 96 introductory psychology students were placed into high-, medium-, or low-memory span groups based on word memory span test scores. Subjects in each memory span group read a passage and reread it, each time being asked to retell it. After the second reading, subjects were asked to retell it with no switch

or a switch in prior reading perspective. Data analysis revealed that high-memory span subjects were able to recall information regardless of encoding perspective, whereas other memory span subjects were unable to recall additional information following a perspective switch. In Experiment 2, 2 types of recall data were collected. Participants were 96 high-memory span and 96 low-memory span subjects from several undergraduate science classes. After reading passages, half the subjects in each memory span group were asked to free recall information from the text, and half were asked to take a cloze recall test. Similar to directives for Experiment 1, subjects in the free recall condition were asked to recall the passage with no switch or a switch in perspective. Subjects in the cloze condition were given a passage with every fifth word deleted with perspective manipulation achieved through written directives. Findings again showed that low-memory span readers were more perspective bound but high-memory span readers were not.

DAVOU, BETTINA; TAYLOR, FITZ; & WORRALL, NORMAN. (1991, November). The interplay of knowledge and abilities in the processing of text. *British Journal of Educational Psychology, 61*, 310–318.

Compares text processing by learners with a highly developed knowledge base (schema group) with that by learners with a less developed knowledge base (nonschema group). Subjects were 19 adults with arts degrees and 20 with science degrees. Subjects with arts degrees were assigned to read either an arts-related passage (schema group) or a science-related passage (nonschema group). Subjects with science degrees were also designated to a schema or nonschema group based on their assigned reading of a science passage or an arts passage, respectively. Arts and science passages were equalized for readability. As subjects read, they were required to mark pausal units in each sentence as they were encountered. Later, they were asked to write a short summary of what they had read. Scores were assigned to the subjects on 8 ability dimensions: number of pausal units identified, effectiveness of summary, inferences, deductions, assumptions, evaluation of arguments, interpretation, and overall critical thinking. Findings of various analyses revealed that the performance of the schema groups was not related to any of the abilities tested, but the performance of the nonschema groups was. Findings suggest that traditional abilities are utilized for text processing only to the extent that prior knowledge is missing.

MCDANIEL, MARK A., & EINSTEIN, GILLES O. (1991, July). Reading a series of similar texts: Testing a schema-based learning theory. *Bulletin of the Psychonomic Society, 29*, 297–300.

Examines a schema model of learning from simple texts and the assumption that repeated exposures promote acquisition of schema and benefit recall for texts conforming to the schema. Two groups (control and letter deletion) of 12 introductory psychology students each were used as subjects. Materials consisted of 18 12-sentence passages, 6 from each of 3 conceptual categories. In the training stage of the experiment, subjects received 6 texts—none from one category, 2 from a second category, and 4 from a third category. Subjects in both groups received the same passages and processing instructions during the training phase. In the test phase, subjects received 1 target passage from each category. Control subjects received the passages intact; subjects in the letter-deletion condition received passages in which 33% of the letters were deleted and replaced by blanks. Letter-deletion subjects were to fill in as many of the letters as possible while reading the passages. All subjects were given a free recall test for the target passages. Findings of an inverted u-shaped curve for recall as a function of prior training tests were replicated using the baseline measure of previous research. However, when using the 0-exposure baseline measure of the present study, findings indicated that recall appeared to be a monotonic function of the number of training passages and reflected proac-

tive interference. This trend was considered to be inconsistent with the idea that a schema is acquired through experience with related training passages and subsequently instantiated for encoding and retrieval of the target passage.

MURATA, NATSUKO. (December, 1993). The effects of comic strips as a teaching strategy. *Science of Reading, 37*, 136.

Contrasts the effectiveness of 3 different text formats on the ability to learn material. Three groups of university sophomores were presented with (1) a comic strip with pictures showing the essential points of the target knowledge, (2) a comic strip with pictures of essential points replaced with pictures of nonessential points, and (3) a printed scenario with no pictures. For a third study, 4 text styles were employed, including comic-book dialogue in columns with no pictures, a narrative related by a single character, and an instruction-manual type of presentation. Major findings included (1) that the comic strip with specific pictures of the target knowledge facilitated comprehension through summarizing and stressing essential points in the text; (2) that even pictures with nonessential points aided subjects in grasping a situation visually; and (3) that there was an equivalence between the effectiveness of learning via comic strips or an instruction manual.

HIRAI, SEIYA, & SHIMIZU, AKIKO. (1993, December). The effects of a pictorial presentation using hieroglyphic characters in teaching preschoolers to read Kanji and Katakana. *Science of Reading, 37*, 147.

Conducts two studies contrasting the effectiveness of different methods of teaching preschool-age children to read simple words. In the first study, 64 subjects were assigned randomly to 1 of 4 groups: Kanji only, Katakana only, Kanji-picture, and Katakana-picture. The Kanji-picture group performed better than the other 3 groups, and no significant difference was noted between the Kanji-only and the Katakana-only groups. The second study compared the effects of a simultaneous-presentations method with a successive-presentations method using Kanji characters. Data from the Kanji-picture group in Study 1 were used for the simultaneous group, while 16 other preschoolers were subjects in the successive group. No significant difference in performance was found between the 2 groups. It was concluded that Kanji characters were appropriate to use with preschoolers who are beginning to read.

WADDILL, PAULA J., & MCDANIEL, MARK A. (1992, September). Pictorial enhancement of text memory: Limitations imposed by picture type and comprehension skill. *Memory & Cognition, 20*, 472–482.

Examines, within 2 experiments, types of text information that are best enhanced by pictures. Subjects for Experiment 1 were 48 undergraduates. Tested in groups of 1 to 4 students, subjects each read an expository passage in which line drawings depicted details or causal/contrastive relations recounted by specific idea units in the text. Control subjects were provided the same text without drawings. Subjects' reading times, self-ratings of their own comprehension, prior knowledge of passage content, and written retellings of the passage information were recorded. Findings of planned contrasts indicated that pictures depicting details significantly improved recall of details, whereas pictures depicting relations significantly improved recall of relational information. Self-ratings of comprehension and prior knowledge did not significantly affect differences among the 3 experimental groups. The presence of pictures did increase reading times, but there was no significant difference between the reading times of the 2 picture groups. Experiment 2 explored the effects of individual differences in reading comprehension ability on recall of illustrated information. The 189 undergraduates were classified as highly, moderately, or less skilled according to performance on the comprehension subtest of the NDRT. Procedures similar to Experiment 1 were implemented and findings showed that the effects of pictorial enhancement are influenced by compre-

hension skill. Relative to no pictures, subjects of all skill levels benefited by detail drawings, whereas only highly and moderately skilled comprehenders benefited by relational drawings.

BURNS, DANIEL J. (1992, October). The consequences of generation. *Journal of Memory and Language, 31*, 615–633.

Reports 7 experiments to support the hypothesis that generation enhances stimulus-response and/or response-specific processes while interfering with response-relational processing and that such interference is caused by failure to process response-relational information after generating targets when ample time is given for processing. Results are discussed in light of response-specific and multifactor theories of generation.

KODA, KEIKO. (1993, Winter). Transferred L1 strategies and L2 syntactic structure in L2 sentence comprehension. *Modern Language Journal, 77*, 490–500.

Investigates how L1 processing skills are applied to L2 when the morphosyntactic features of the two languages are different. In particular, examined are the ways in which the L1 case-signaling system influences L2 sentence comprehension strategies. Data were collected from 21 Americans, 12 Chinese, and 13 Koreans; all were enrolled in a U.S. university and had studied Japanese for about 9 months. Subjects were administered a sentence comprehension task; a particle test in which a sentence completion format was used to assess knowledge of case-marking particles; and 2 reading comprehension measures, cloze and paragraph comprehension. All measures were administered in Japanese. Findings suggested that the L1 case-signaling system has an impact on the way L2 learners evolve cognitive strategies for sentence processing. American and Chinese subjects were most successful when both word order and case-marking particles were available; Korean subjects' performance was improved when case-marking particles were present but unaffected by word order. Findings are interpreted as suggesting that L2 learners develop mechanisms that incorporate L1 and L2 linguistic features. Further, learners' L1 and L2 knowledge coalesce and jointly shape cognitive strategies in L2 processing. Reading comprehension was found to be highly correlated with particle knowledge. Data indicated that (1) performance patterns in sentence comprehension differs among L2 readers of Japanese with varying L1 backgrounds, (2) the degree to which readers use word order varies among different language groups, (3) both knowledge and use of case-marking particles correlate with reading comprehension, and (4) particle knowledge and the ability to activate this knowledge greatly enhance text comprehension.

IV–6 Visual perception

DAUTRICH, BARBARA R. (1993, June). Visual perceptual differences in the dyslexic reader: Evidence of greater visual peripheral sensitivity to color and letter stimuli. *Perceptual and Motor Skills, 76*, 755–764.

Collects evidence regarding differences that may exist in the visual perceptual processes between dyslexic and proficient readers. The sample consisted of 10 individuals admitted to a specialized college program for LD persons and 10 randomly selected college students judged to be proficient readers based on academic performance. While maintaining single-eye fixation on a foveal mirror, subjects were to name 6 stimuli upon recognition in the visual field. Six different orientation settings were given. For all subjects, colors were recognized at greater peripheral distances than were letters. Dyslexic subjects perceived letter and color stimuli at greater peripheral distances from the point of fixation than did normal readers. Results are interpreted as suggesting that the foveal processes required for reading may be compromised in dyslexics by the presence of competing stimuli in the visual perceptual field.

HUANG, H.S., & HANLEY, J. RICHARD. (1995, January). Phonological awareness and visual skills in learning to read Chinese and English. *Cognition, 54*, 73–98.

Investigates the relation between phonological awareness and reading skill in children learning to read Chinese and those learning to read English. Subjects were children from 3 primary schools in the United Kingdom, Taiwan, and Hong King, all between 8 and 9 years of age. UK subjects were 45 primary school children in Liverpool, all of whom were native speakers of English and none of whom were Chinese in origin or had ever learned Chinese. Taiwanese subjects were 50 third graders who had learned Zhu-Yin-Fu-Hao, a phonological script, during the first 10 weeks of grade 1. All were native Chinese, spoke Mandarin and Taiwanese, and had little or no exposure to English. Participants from Hong Kong were 42 third graders whose first language was Cantonese; none had learned Pinyin, an alphabetic script, or Zhu-Yin-Fu-Hao. They had studied both written and spoken English and were familiar with the Roman alphabet. Two types of reading tests were used: (1) the Schonell Graded Word Reading test, R1, was used in Britain and Hong Kong; and (2) the Chinese Character Recognition test was used in Hong Kong and Taiwan. The latter was developed to follow the Schonell as closely as possible. In addition, children were administered the Visual Form Discrimination (VFD) test, the Visual Paired Associates (VPA) test of the Wechsler Memory Scale-Revised, Raven's Coloured Progressive Matrices test, the British Picture Vocabulary Scale (in Taiwan and the UK), the Odd Man Out tests, and the Phoneme Deletion tests. Three versions of the Odd Man Out tests were used: English, Chinese, and Chinese nonword. Each version consisted of three parts: first sound difference, middle sound difference, and last sound difference. An English and a Chinese version of the Phoneme Deletion tests were administered. Taiwanese children received only the latter, UK children only the former, and the Hong Kong subjects received both versions. All tests were administered individually. Performance on the phonological tests was significantly related to reading performance of UK children even with IQ and vocabulary effects partialled out. Results of regression analyses did not support the view that differences in phonological awareness were a primary cause of differences in reading ability among children learning to read Chinese. The VPA results were significantly related to reading results of children in Hong Kong and Taiwan but not to the performance of UK children. It was concluded that learning to read Chinese is less dependent on phonological awareness skills and more dependent on visual skills than learning to read English.

BOSMAN, ANNA M.T. & DE GROOT, ANNETTE M.B. (1995, April). Evidence for assembled phonology in beginning and fluent readers as assessed with the first-letter-naming task. *Journal of Experimental Child Psychology, 59*, 234–259.

Studies, in three experiments, the differences and similarities in word recognition between beginning and fluent readers. Experiment 1 asked whether first-letter naming in beginning readers and in fluent readers was facilitated by an orthographically legal context. Subjects were 28 first graders after 8 months of formal reading instruction and 40 undergraduates, all in Amsterdam, the Netherlands. Stimuli consisted of 24 words, 24 legal nonwords, and 24 illegal nonwords. Subjects viewed the 4-letter stimuli on a computer screen and were to name the first letter of each word. First graders were to use the phoneme to specify the initial grapheme. Half of the adults were to use the letter name to specify their response and half were to use the phoneme. For adults, naming the first letter was faster when it was part of a legal letter string than when it was part of an illegal nonword. The group responding with the letter name was faster than the group that had to respond with the phoneme. For beginning readers, naming the first letter of a word was faster than naming the first letter of legal and illegal nonwords. In Experiments 2 and 3, the authors investigated the possibility that the results reflect an effect of response competition rather than an orthographic-context in-

terpretation. Again all subjects were Dutch and included 20 first graders and 20 undergraduates in Experiment 2, and 41 first graders and 40 undergraduate students in Experiment 3. First graders in the third experiment were divided into 21 medium and 20 poor readers. Pronounceability appeared to be the most important factor in the first-letter naming task. The data suggested that the effects obtained were due to response competition. In addition, the data indicated that the similarities in word recognition by both fluent and beginning readers surpassed the differences between the two and that word recognition of both groups is mediated by phonology.

HORTON, KEITH D., & MCKENZIE, BARBARA D. (1995, May). Specificity of perceptual processing in rereading spatially transformed materials. *Memory & Cognition, 23*, 279–288.

Asks if the reading and rereading of spatially transformed text produces specific perceptual transfer. Subjects were 15 to 36 undergraduate volunteers who, for each of the 5 experiments, satisfied criteria for participation. With slight variations in the procedures for each experiment, subjects read triplets of 3 unrelated words or conceptually related words during study trials. Letters within the words of each of the triplets presented were rotated 180 degrees around their vertical axes. For test trials, subjects read words from studied and unstudied triplets. Speeds of word reading were recorded for both study and test trials. Repeated measures ANOVA were applied to the data from each experiment. Related triplets showed conceptual processing effects on rereading times. For 4 of 5 of the experiments, rereading times showed no effect of format for either related or unrelated triplets. For Experiment 4, unrelated triplets did yield some evidence of specific processing transfer but only when words were presented in an unfamiliar typography.

GREENBERG, SETH N., & KORIAT, ASHER. (1991, November). The missing-letter effect for common function words depends on their linguistic function in the phrase. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 17*, 1051–1061.

Examines, in 4 experiments, influences on letter detection in various high-frequency function words. Paid participants in each experiment were 29 to 70 college students. Subjects read 2 passages in which the letter *f* appeared 15 times: 10 times in the high-frequency word *for*, and once in 5 different low-frequency words beginning with the letter *f*. Half of the *for*'s in each passage appeared in the phrase *for or against*, where *for* could be considered a content word. The other half of the *for*'s appeared in the phrase *for better or for worse* where *for* is considered a preposition. Comparison of percentages and ANOVA procedures applied to detection error data showed that *f*'s appearing in content words were easier to detect than *f*'s appearing in function words. The findings suggest that letter detection in function words is affected by their linguistic role in the text. Using similar procedures with other letters appearing in high-frequency words that serve in function and content capacities, Experiments 2 and 3 replicated, extended, and supported the findings of Experiment 1.

WALLACE, BENJAMIN. (1991). Imaging ability and performance in a proofreading task. *Journal of Mental Imagery, 15*(3 & 4), 177–188.

Investigates proofreading accuracy as a function of imaging ability. Subjects were 32 undergraduates enrolled in introductory psychology classes. Participation was voluntary but based on response performance on the Vividness of Visual Imagery Questionnaire. Half the subjects were selected because they judged themselves as poor imagers. Subjects read 6 unrelated passages ranging in length from 250 to 275 words. Each passage contained 26 words that were misspelled, each through substitution of one medial-position letter with another

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that was similar or different in shape. In each passage, 13 of the misspelled words were function words and 13 were content words. Subjects were asked to circle misspelled words as they read. Findings of ANOVA procedures applied to the data showed that when words contained similarly shaped letter substitutions, vivid visual imagers found more spelling errors than poor visual imagers. There was no difference in the performance of the 2 groups in words containing differently shaped letter substitutions. For both subject groups, function words generated more proofreading errors than content words.

AWAIDA, MAY, & BEECH, JOHN R. (1995, Winter). Children's lexical and sublexical development while learning to read. *Journal of Experimental Education, 63*, 97–113.

Investigates factors that influence the lexical and sublexical routes of reading during the early phase of reading development. A battery of 16 tests was administered to 236 4-, 5-, and 6-year-old children and again 1 year later. Measures of spelling, vocabulary, short-term memory, visual discrimination, nonverbal intelligence, and phonological processing and fluency were given. The criterion variable representing the lexical development route was performance on oral reading of single words. The criterion variable for the sublexical route was oral reading of nonwords. Stepwise regression revealed the best indicators of reading ability for children at age 5 were the ability to visually discriminate letter-like forms. Best predictors of reading ability at age 6 were reading ability at age 5, SES, phonological processing, and nonword reading scores. For 7-year-olds, reading ability at age 6 and nonword reading were the best predictors. Phonemic and pattern recognition were revealed to be crucial factors in the development of the lexical route. A Matthew effect was observed once formal reading instruction was initiated, with children who were already good at reading doing better the following year. Initially, the sublexical route appeared to be affected similarly. However, previous performance in phonemic processing and spelling become significant after formal reading instruction is initiated.

IV–7 Auditory perception

STEFFENS, MICHELE L.; EILERS, REBECCA E.; GROSS-GLENN, KAREN; & JALLAD, BONNIE. (1992, February). Speech perception in adult subjects with familial dyslexia. *Journal of Speech and Hearing Research, 35*, 192–200.

Investigates the phonetic perceptual processing capabilities of adult dyslexic subjects to determine whether processing of acoustic information is differentially affected in dyslexics. Three synthetic speech continua were studied: one in which steady-state spectral cues distinguished the vowel stimuli, one in which rapidly changing spectral cues were varied, and one in which silence duration was systematically varied. The three continua were employed to assess subjects' abilities to use steady state, dynamic, and temporal cues. Subjects included 18 dyslexic adults and 18 normal readers. Dyslexics were all participants in a multigenerational study of familial dyslexia. The following measures were administered: WAIS-R, GORT-R; the letter-word identification, passage comprehension, and word-attack subtests of the WJPEB; Nonsense Passage Errors (NPE); Nonsense Passage Time (NPT); and the spelling subtest of the WRAT-R. Subjects were tested individually in one session. Findings revealed systematic small differences in phonetic perception in the dyslexic group. Dyslexics perceived and discriminated vowel and consonantal synthetic speech stimuli, but performance of individual subjects was heterogeneous. There were indications that dyslexic adults required greater silence duration than normal readers in order to shift their perception. Dyslexics did not appear to use the acoustic cues in the same manner as did normal readers, but their overall performance was less accurate than that of normal readers.

KERSHNER, JOHN R., & GRAHAM, NORRIS A. (1995, January). Attentional control over language lateralization in dyslexic children: Deficit or delay? *Neuropsychologia, 33*, 39–51.

Compares a group of phonological dyslexic children with age-matched good readers and with younger reading-matched good readers on a forced attention dichotic listening task. The sample, all attending suburban schools in metropolitan Toronto, Canada, consisted of 30 dyslexics in grades 7 or 8 matched for CA with 30 good readers and matched on reading level with 30 younger readers. All subjects were boys. Children were tested individually, with half in each group assigned randomly to the left ear (LE) first order or the right ear (RE) first order. Children listened to 84 dichotic pairs of monosyllable digits and were instructed to pay attention to the designated ear and to manually point to and verbally report the digits from the attended ear after each trial. Performance was scored for the number of correct digits reported from the attended ear and the number of intrusions from the nonattended ear. The CA-matched group was superior to the other two groups for both LE and RE number of correct responses and fewer intrusions. All groups demonstrated a right ear advantage (REA), but younger readers exhibited a larger ear difference score for intrusions in comparison to older good readers. For all groups, there was a larger REA when the LE was attended first. Further analyses indicated that when the LE was attended first, in both good reader groups a significant number of children demonstrated a REA, but the incidence of children with REAs was not significant among the dyslexic group. When the RE was attended first, there was no statistically significant group difference found in the REA. As opposed to the good reader groups whose REAs were significantly different across the two orders, dyslexic boys failed to exhibit a shift in REA between the two orders. Findings are interpreted as suggesting that dyslexics may suffer from a primary attentional impairment in altering the REA.

IV–8 Reading and language abilities

RICHGELS, DONALD J. (1995). Invented spelling ability and printed word learning in kindergarten. *Reading Research Quarterly, 30*, 96–109.

Explores the word learning performance of kindergarten pupils who had received no formal instruction in phonemic awareness or in spelling and compares the performance of good inventive spellers to that of poor inventive spellers. Initially, 119 kindergartners were screened for alphabet knowledge, word reading ability, and invented spelling ability; 16 good inventive spellers and 16 poor inventive spellers were identified to participate in a printed word learning task. The screening measures included the Boehm Test of Basic Concepts, a letter identification test using words from the Woodcock-Johnson, and an invented spelling task developed by the researcher. The word learning task used 2 sets of phonetically simplified words, one more difficult than the other, presented on 2 consecutive school days. Word learning tasks involving paired associate learning were conducted in individual sessions with the experimenter. On each of 2 days, subjects completed an initial study trial and then up to 7 test trials with corrective feedback. For each subject and for each set of words, an average of the scores from all trials, a criterion score, and a recall score were computed. Average scores were analyzed using a split-plot design, testing within subjects for effect of condition (easy or difficult) and between subjects for effect of group (good or poor inventive spellers). ANOVAs were used to test for differences on criterion and recall scores. Results revealed that good inventive spellers performed significantly better on the 2 sets of phonetically simplified words than the poor inventive spellers.

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MARTINEZ, MIRIAM, & ROSER, NANCY L. (1994). Children's responses to a chapter book across grade levels: Implications for sustained text. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 317–324). Chicago, IL: National Reading Conference.

Observes what portions of a single chapter book children focused on during discussion and to what extent children supported their talk with text during the discussion. The participants were 6 classes of elementary children (kindergarten and grades, 2, 4, and 5) in a suburban school district. The classrooms employed an ongoing literature read-aloud program involving daily discussion of children's literature. In the study, teachers read aloud to the class daily, followed by response journal entries that served as the stimuli for group discussion. In writing, the kindergartners used drawing, scribbling, writing random letters, and invented spellings. All chapter readings and discussions were audiotaped, and the turning-point chapter was videotaped. The discussions that occurred across grade levels in response to the turning-point chapter were analyzed and compared for children's talk. Findings indicated that children talked about different aspects of the text depending on their grade levels. Older children primarily chose to explore unresolved story situations, and younger children talked more about events within the chapter just read to them.

WHITE, JANE; SAMPSON, MARY BETH; SEABORG, MARY BETH; FOWLER, TERI; & KEMP, MARSHA. (1994). The nature of first graders' talk in conferences: With and without adult participation. In Charles K. Kinzer and Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 240–248). Chicago, IL: National Reading Conference.

Compares the oral discourse of first graders during peer writing conferences and teacher-assisted writing conferences. Subjects were 21 first graders enrolled in a heterogeneously grouped intact suburban classroom. The study was conducted midyear when pupils generated their own writing topics and teachers modeled peer conference techniques. Writing had been an extensive part of the classroom since the beginning of the year. Peer conferences were conducted for approximately 4 weeks and involved children who wanted to share their writing and be a part of the conference group. Teacher-assisted (peer/adult) conferences continued for 4 weeks. All conferences were taperecorded and transcribed. The transcripts were parsed into idea units and analyzed for content and audience related categories. The oral discourse patterns were different in peer and peer/adult conferences. The leader of the group (person in control) seemed to dominate the discussion. The adult assumed the leadership role in the peer/adult conferences, which followed a traditional classroom discourse and interaction pattern. During peer conferences the author assumed the leadership, hence changing when a new author shared his or her piece of writing. A focus of talk in peer conferences related to conference management such as staying on task, a pattern less frequently noted in the peer/adult conferences Also, the content talk observed during peer conferences was an affective response to the piece of writing, as opposed to an emphasis on revision and editing noted during the peer/adult conferences. Thus, the adult seemed to assume a teaching role, whereas pupils participated as a reactive audience during the conferences.

STAGE, SCOTT A., & WAGNER, RICHARD K. (1992, March). Development of young children's phonological and orthographic knowledge as revealed by their spellings. *Developmental Psychology, 28*, 287–296.

Examines the emergence of children's phonological and orthographic knowledge through analysis of their nonword spellings. Subjects were 187 children attending a campus-based developmental research school. The sample consisted of 45 kindergartners, 45 first graders, 45 second graders, and 52 third graders. All the children were asked to perform

tasks requiring nonword spelling, sound categorization, letter span recognition, word level decoding, and general ability. Evaluation of each variable's distribution at each grade level revealed that children's phonological knowledge, orthographic awareness, and working memory were all developmentally constrained. Limitations in working memory appeared to influence younger, but not older, children's nonword spelling performances.

BEENTJES, JOHANNES W.J., & VAN DER VOORT, TOM H.A. (1991). Children's written accounts of televised and printed stories. *Educational Technology, Research & Development, 39*(3), 15–26.

Compares written retelling of stories watched on television with printed stories that were read. Subjects were 127 children ages 10 to 12 from 2 primary schools in Leiden, The Netherlands. Two groups were formed, matched on grade level and reading comprehension level. After either reading a story or watching a televised version of it, the children retold the story in writing. Content analyses of the written retellings were categorized according to various facets of reproduction, inferencing, and language usage. Findings of several *t* tests applied to the data indicated that children who had watched the televised version rendered more complete retellings and made fewer errors than children who read the stories. However, written retellings by children who read the printed versions contained more specific references to characters and details pertaining to story elements, thus making the written retelling more easily understood.

GILLAM, RONALD B., & JOHNSTON, JUDITH R. (1992, December). Spoken and written language relationships in language/learning-impaired and normally achieving school-age children. *Journal of Speech and Hearing Research, 35*, 1303–1315.

Measures cognitive and linguistic differences in the spoken and written language produced by language/learning-impaired (LLI) and normal achieving children. Each of 10 LLI children between the ages of 9 and 12 was matched with 3 same-sex, normal achieving pupils: 1 matching in age, 1 matching in spoken language ability, and 1 matching in reading achievement. Spoken and written narratives produced by each child were analyzed at both the sentential and the discourse levels on various facets of form and content complexity. Repeated measures ANOVA performed on the data enabled examination of relevant interactions as well as intercorrelation coefficients among measures. Spoken narratives were in many ways linguistically superior to written narratives for all groups. The content of written narratives displayed a characteristically different organization than the content of spoken narratives. Spoken narratives also contained more local interconnections than global interconnections, a feature that was reversed for written narratives. Reading-writing relations typically exhibited by LLI and reading matched children differed from those typically exhibited by age and language matched children in the way language form was organized. Compared to all other groups, LLI children produced more grammatically unacceptable complex t-units within their spoken and written stories.

MARTIN, WENDY, & EVERSHED, JAMIE. (1994). Young children's role play: There's more here than meets the ear. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 75–79). Cheshire, England: United Kingdom Reading Association.

Analyzes young children's knowledge of different discourses through the recorded talk of three year 1 girls as they played school in the annex adjoining their classroom. Examination of transcriptions illustrates an impressive command of "teacher talk" by the child role playing the teacher, including the use of boundary markers, attention getting devices, group directed terms, evaluative expressions, and models. Similarly, the other children used language appropriate to their knowledge of teacher language but also demonstrated their understanding of classroom procedures and power relations. In addition, their portrayals of teacher and

pupil roles were exaggerated and not the norm in their classroom. This suggests that children bring to their role-plays ideas from many different sources including fictional ones. During play children use both their fictional and their factual experiences for their own purposes.

BARBIERI, MARIA SILVA, & LANDOLFI, LILIANA. (1994). Learning how to explain: The effects of mother's language on the child. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and literacy: An interactionist perspective* (pp. 191–222). Cambridge, England: Cambridge University Press.

Examines mother-child interactions during book reading. Included as subjects were 12 mother-child pairs who were videotaped during 4 sessions at 3 week intervals. Children were divided into 3 age groups: 30, 45, and 60 months. Pairs interacted using a booklet depicting 4 situations accompanied by a brief text. In the first phase of the study, the child's baseline level of knowledge and understanding of the pictures, situations, and events depicted was evaluated. Phase 2 consisted of the role of mothers in explaining the various events. In Phase 3, children were asked specific questions as a means of checking knowledge after the input phase. Phase 4 paralleled the first so that children's production in the 2 phases could be compared. Subjects who did not speak were excluded; thus the final sample consisted of 2 children age 30 months, 3 age 43 months, and 4 age 61 months. Language produced was divided into information units and coded on the basis of 4 categories: content, origin, interaction techniques, and linguistic devices used. Transfer of information from mother to child was found, with evidence that the items remained in the child's memory 3 weeks later. Autonomy of children increased with age: they asked fewer questions, brought a greater amount of preestablished knowledge into the session, and elaborated the material in a more personal way. Younger children depended heavily on the mothers as a source of information and tended to repeat what the mothers said, although in a simplified manner. Older youngsters showed more personal elaboration.

PANOFSKY, CAROLYN P. (1994). Developing the representational functions of language: The role of parent-child book-reading activity. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and literacy: An interactionist perspective* (pp. 223–242). Cambridge, England: Cambridge University Press.

Describes the functions of language during parent-child book reading. Language functions were observed during a longitudinal ethnographic study of family bookreading events in the homes of 6 preschool children. Children ranged in ages from 2 to 6 years and were observed every 6 to 8 weeks over the course of a year. Data came from a total of 36 sessions, with each session lasting 30 to 50 minutes. Two global functions were studied, interactional and representational. Interactional functions related to the activity itself and representational talk was related to text. Interactional functions accounted for 5% to 15% of the utterances during a session. Representational or text-related discourse was divided into 7 subfunctions: attentionals, pictorials, connectives, inferentials, emotives, imaginatives, and recitations. Pictorials, connectives, and inferentials were used most frequently, with functions varying developmentally both for individuals and across ages. At the beginning of the year, almost all initiations of both connectives and inferentials were make by the parent; by the end of the year, children's use of these functions outnumbered parents' use by almost 2 to 1.

SMITH, LARRY W. (1994). An interactionist approach to the analysis of similarities and differences between spoken and written language. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and lit-*

eracy: An interactionist perspective (pp. 43–81). Cambridge, England: Cambridge University Press.

Seeks to determine the differences and similarities between spoken and written language across 3 domains (informal conversation, formal spoken interview, and written essay) when topic and subjects are held constant. Ten graduate students served as participants, with data for each domain collected over a 2-week period. The following variables were controlled: selection of topic, selection of subjects, order of tasks, time constraints for tasks, transcription of spoken language data, and categorization of linguistic definition of the structures examined. There were 22 categories of linguistic structures investigated. Results confirmed findings of an earlier study: a higher incidence of linguistic structures exhibiting fragmentation and involvement were used in spoken language, while there was a higher incidence of integration and detachment in written language. In addition, although participants used language differently in the 2 spoken language situations, the speech used in formal interviews was structurally closer to conversational speech than to the language of written essays. A second study was undertaken to examine how coherence was achieved in the 3 language domains. Data from the first study were reanalyzed for given and new information, with data from 2 participants reported in detail. Differences were noted in how given and new information were distributed in spoken and written language with marked variation found between the 2 subjects analyzed.

GOLDENBERG, CLAUDE, & PATTHEY-CHAVEZ, GENEVIEVE. (1995, January/February). Discourse processes in instructional conversations: Interactions between teacher and transition readers. *Discourse Processes, 19*, 57–73.

Proposes the use of instructional conversations (IC) as a means of positively affecting the conceptual and linguistic development of low-income, cultural-minority children. IC lessons are intended to pull children into a lively and stimulating discussion of important ideas. Data collected were from a body of 15 small-group reading and writing lessons, each about 20 minutes in duration. Lessons were conducted over 1 semester in a fourth grade classroom composed largely of Latino children. Nine of the lessons were planned as IC lessons, with the analysis done to determine whether they could be distinguished from other types of lessons and whether they succeeded as instructional events. IC lessons were clustered into 2 types: prereading and postreading. In IC lessons, between 37% and 49% of the lesson talk was uttered by children, whereas in the 6 control lessons, 70% of the lesson talk was teacher talk. On the whole in IC lessons, children talked more; often they spoke spontaneously, interrupted one another, and objected to one another and to the teacher at times. A select interaction occurring during 1 postreading IC lesson is presented.

DE GEUS, WENDY C., & REITSMA, PIETER. (1994). Cognitive components of task difficulty in document literacy. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 101–111). Chicago, IL: National Reading Conference.

Asks why a particular functional reading task is more difficult than another task in terms of cognitive operations necessary to accomplish the task. Analyses were done on the tasks and data from a literacy survey that had been administered to a nationwide sample of 12-year-old Dutch children. The survey contained functional literacy tasks as well as traditional reading tasks. Based on similarity to the National Assessment data set, 72 document search items belonging to 9 different documents were selected for analyses. Employed was the procedure of relational grammar approach, which described the structure and content of the information in a document by semantic features, units of specific information, and organizing categories. Independent raters scored 13 variables for all items (agreement was 74 to 100%). In order to measure the same possible sources of difficulty as relational grammar variables, yet

reduce the effort in rating variables, an alternative rating scheme comprising 9 different scales was devised and used in the study. The final scores for the 13 variables based on the relational grammar were used as predictors in 4 multiple regression analyses (preselected, stepwise, proven/forced, proven/forward). In all analyses the process variable, type of information, was a significant predictor. Number of specifics and number of embedded specifics also were consistent predictors. In all analyses, the variance accounted for approximates 50%. The final scores for the rating variables (alternative scheme) yielded similar results as those derived from relational grammar.

SAXBY, MAURICE. (1995, March). Changing perspectives: The implied reader in Australian children's literature, 1841–1994. *Children's Literature in Education, 26,* 25–38.

Examines Australian literature written for children between 1841 and 1994, and discusses factors that affect linguistic demands made of the "implied reader." The author's examination of children's books published between 1841 and 1891 shows the literature was typically geared to an elite readership. The titles, tones, styles, and genres of the writings, as well as the vocabulary, sentence structures, and forms of disclosure used within them reflected a view that children could easily value and replicate adult behavior and language. The authors' analyses of children's books written since 1891 demonstrate how theory and research in child development produced a gradual change in how literature for children is linguistically structured and conceived.

SHONERD, HENRY. (1994). Repair in spontaneous speech: A window on second language development. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and literacy: An interactionist perspective* (pp. 82–108). Cambridge, England: Cambridge University Press.

Reviews briefly previous studies and more extensively reports previous work by the author on self-repairs form spontaneous speech of ESL learners. It is noted that the topic of repair has received little attention in the study of language, but the analysis of speech repair of ESL learners suggests that the study of repair offers opportunities to note how language is acquired. Findings indicate that repair is instrumental to language acquisition, with great differences in the self-repair of L2 learners and native speakers of a language.

DONIN, JANET, & SILVA, MARIA. (1993, September). The relationship between first- and second-language reading comprehension of occupation-specific texts. *Language Learning, 43,* 373–401.

Reports two within-subjects experiments in which detailed discourse analysis techniques were used to analyze nursing students' comprehension of texts typically found in their anticipated workplace (Montreal, Canada, area hospitals) in both their first and second languages. In the first experiment, sentence interpretation and reading measures were used to compare 2 groups of English-speaking nursing students' comprehension of matched medical case files presented in their first and second languages and interpreted in either language. Participants included 18 first-year nursing students enrolled in 2 French for nursing classes. All had English as their first language. Three case file descriptions of patients were constructed, each outlining a different medical problem. Each was prepared in both English and French and followed the same 3-part structure: patient's symptoms, medical and family background, and routine medical examination results. Participants were individually tested with each text presented 1 sentence at a time on a computer screen. As each sentence disappeared from the screen, subjects were to give an interpretation of it. Students read and interpreted each of the 3 texts: one in English with English interpretation, one in French with English in-

terpretation, and one in French with French interpretation. Sentence interpretation protocols were transcribed and segmented into major clauses, which were then matched against the prepositional analysis of the text. Experiment 2 included 9 nursing students with the same reading materials as in the previous experiment. Students completed the reading comprehension subtest of Modern Language Association French Foreign Language Test. Procedures were identical to those in Experiment 1 except that the prompt to interpret appeared on the screen following the last sentence of each paragraph. In Experiment 1, when the task was sentence interpretation, significantly lower levels of recall of second-language material were found when second-language production was used than when first-language production was called for. In Experiment 2, although the differences for recall were not significant, fewer inferences were produced under the French–French condition than under the French–English condition. Findings are felt to support the argument that the use of second-language production tends to underestimate and distort second-language comprehension.

HEDGCOCK, JOHN, & ATKINSON, DWIGHT. (1993, Summer). Differing reading-writing relationships in L1 and L2 literacy development? *TESOL Quarterly*, *27*, 329–333.

Compares the results of two studies designed to measure the effects of overall and genre-specific extensive reading habits on school-based writing. Subjects in the first study were 157 native speakers of English (L1) who were completing the first semester composition requirement at a university. Subjects in the second study were 115 students, native speakers of other languages (L1), enrolled in intermediate and advanced ESL writing courses at the same university. Both groups responded to a questionnaire on English language reading habits. The ESL students also completed an identical questionnaire on reading habits in their first languages. Subjects were then scored on timed measures of expository writing. Although L1 and L2 subjects were given different writing prompts, each group's writing samples were scored holistically by 3 trained raters. Omnibus and stepwise multiple regression analyses were used to identify the reading-habit variables, which were strong predictors of expository writing performance. Results of the L1 study indicated that expository writing proficiency is significantly related to 14 aggregate reading-habit variables and significantly but not strongly related to a subset of 3 genre-specific reading-habit variables. Results of the L2 study indicated no significant relation.

OSAKA, MARIKO; OSAKA, NAOYUKI; & GRONER, RUDOLF. (1993, March). Language-independent working memory: Evidence from German and French reading span tests. *Bulletin of the Psychonomic Society*, *31*, 117–118.

Determines whether the efficiency of working memory is independent of native language. Subjects were 15 adults, ages 23 to 50, who were bilingual in German and French. Using procedures of the reading span test, subjects were presented with 70 sentences, divided into groups of 5 in each language. Subjects were asked to read the sentences in each set aloud at their own pace. At the end of a set, subjects were to recall the last word of each sentence they had just read. The level at which the subject correctly answered 3 out of 5 sets was used as a measure of his or her reading span. Results indicate that the efficiency of working memory is not influenced by language.

MABBOTT, ANN SAX. (1994, Fall). An exploration of reading comprehension, oral reading errors, and written errors by subjects labeled learning disabled. *Foreign Language Annals*, *27*, 293–324.

Explores whether decoding and encoding problems with a first-language acquisition carry over into second-language acquisition of LD subjects. Subjects were 3 graduate and 2 undergraduate students, all English speaking and all identified as LD. Each subject was individually interviewed in a 2-hour session to determine what problems they had with L1 acquisition,

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how they had learned L2, what problems they had with L2, and what strategies they used in their jobs and studies. Interviews were followed by 2 dictations given in English and the subjects' L2 languages. Subjects also were asked to read texts orally and silently in English and in their L2. Qualitative analyses were used to compare performance between English and the second language. Results are reported on a case-by-case basis. In general, subjects had the same kinds of difficulties and made the same kinds of errors in both languages.

IV–9 Vocabulary and word identification

LAXON, VERONICA; SMITH, BOB; & MASTERSON, JACKIE. (1995). Children's nonword reading: Pseudohomophones, neighbourhood size, and priming effects. *Reading Research Quarterly, 30*, 126–144.

Investigates young readers' decoding of nonwords and how various knowledge sources interact with sublexical processes to aid word recognition. Primary school children, ages 7, 8, and 10, from a small town in the west of England read aloud consistently pronounceable nonwords that were 4 letters in length. Half of the nonwords sounded like real words, and half did not; half of each type had many orthographic neighbors, and half did not. Each nonword was either presented alone or primed by a word that was semantically related to its base word (the word it sounded like). ANOVA procedures applied to the data showed that, regardless of age, nonwords with many orthographic neighbors were pronounced significantly more than nonwords with few orthographic neighbors. Subjects from each age group also elicited more regular pronunciations for nonwords that sounded like real words than for nonwords that did not. Semantic priming enhanced regular pronunciations of real sounding nonwords. Developmental trends were apparent in the findings.

JARED, DEBRA, & SEIDENBERG, MARK S. (1991, December). Does word identification proceed from spelling to sound to meaning? *Journal of Experimental Psychology: General, 120*, 358–394.

Examines the role of phonological information in visual word identification. Participants in each of 6 experiments were 12 to 25 undergraduates. Through the span of the study, subjects were administered several progressively more tailored semantic decision tasks. Various analytic procedures applied to the data yielded evidence suggesting that, for skilled readers, word meaning is activated through use of phonological cues, but only for low-frequency words.

STE-MARIE, DIANE M., & JACOBY, LARRY L. (1993, July). Spontaneous versus directed recognition: The relativity of automaticity. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 19*, 777–788.

Contrasts, in 7 experiments, spontaneous and directed word recognition. The experiments each involved between 17 and 59 students enrolled in psychology courses. In the first phase of each experiment, a list of words was presented for study. To measure recognition, each target word was flanked above or below with a familiar word or an unfamiliar word. Subjects had to recognize the target word while ignoring the word that flanked it. It was felt that spontaneous recognition of the flanking word would affect how quickly and how accurately the target would be recognized, with familiar flankers resulting in faster target recognition than unfamiliar flankers. Thus, dependent variables for repeated measures ANOVAs were speed and accuracy of target word recognition. In Experiment 1, distribution of attention at testing resulted in more rapid recognition decisions for familiar flankers than unfamiliar ones. In follow-up experiments, other factors that influence spontaneous recognition were explored. These included number of flanker presentations prior to testing and perceptual

similarity between flankers and targets. The nature of overall findings suggests that spontaneity of recognition is relative to the factors that influence it.

LAXON, VERONICA; MASTERSON, JACQUELINE; & COLTHEART, VERONIKA. (1991, November). Some bodies are easier to read: The effect of consistency and regularity on children's reading. *Quarterly Journal of Experimental Psychology, 43A*, 793–824.

Examines the kinds of orthographic information utilized for word identification by children at different stages of reading development. Subjects were 87 children from 3 classes in a London, England, primary school. The CAs of the subjects ranged from 7.0 to 9.0 and their RAs ranged from 6.6 to 13.7. In 2 separate tasks, subjects read aloud 4-letter words and nonwords groups according to body types (vowel and terminal letter) that varied in extent of consistency and regularity of pronunciation. Findings of regression procedures applied to the data showed that, regardless of RA, children's performance was affected by body types of word/nonwords presented.

WEINER, SUE. (1994, September). Effects of phonemic awareness training on low- and middle-achieving first graders' phonemic awareness and reading ability. *Journal of Reading Behavior, 26*, 277–300.

Studies the effect of phonemic awareness training on the phonemic awareness and reading ability of 79 low- (below 32nd percentile) and middle-achieving (above 32nd percentile) first grade readers over a 6-week period. Subjects were randomly assigned to 1 control and 3 experimental treatment groups: phonemic skill training (skill and drill group), phonemic skill training plus decoding (semiconceptual group), and phonemic skill training plus decoding plus reading (conceptual group focusing on connections among the processes). Groups met twice a week for 25-minute sessions. Assessments included tests of segmentation, deletion, deletion and substitution, and standardized (GMC) and informal (decoding and oral reading measures) tests of reading given at study conclusion. An additional oral reading measure was taken 10 weeks later. Improvements were obtained on all dependent measures over time, regardless of treatment group. Differences, however, were not statistically significant on reading scores or for training in phoneme deletion or deletion and substitution. Experimental groups scored higher than controls on segmentation. Instruction that tried to develop a conceptual connection was ineffective for the low readers, leading the researchers to conclude that such training many not be beneficial for lower level readers.

BOWEY, JUDITH A., & HANSEN, JULIE. (1994). The development of orthographic rimes as units of word recognition. *Journal of Experimental Child Psychology, 58*, 465–488.

Examines the development of and individual differences in children's ability to use orthographic rimes during the reading process. Experiment 1 tested the idea that with increases in beginning readers' sight vocabulary, familiar orthographic rimes arise as functional units of print. Subjects were 205 first graders divided into quartiles, each representing a reading level group. Subjects read sets of pseudowords varying in frequency of their constituent orthographic rimes. A 2-way reader group by orthographic rime frequency ANOVA applied to the percentages of pseudowords read correctly by children in each group showed that only those first graders with more developed sight vocabularies displayed the orthographic rime frequency effect. Experiment 2 used a 3-group reading level design to examine further the orthographic rime frequency effect. The subjects included 20 poor reading fourth graders, a CA control group of 20 average fourth grade readers, and a reading level match group of 20 average second graders. The sets of pseudowords were once again read and ANOVA procedures applied. Strong main effects were noted for reader-group and orthographic rime frequency. Findings of both experiments suggest that the size of the orthographic rime frequency effect reflects the size of children's sight vocabulary as well as their grapheme-phoneme conversion skills.

McGregor, Karla K., & Leonard, Laurence B. (1989, May). Facilitating word-finding skills of language-impaired children. *Journal of Speech and Hearing Disorders, 54*, 141–147.

Studies the effects of an elaboration-based treatment and a retrieval-based treatment on the word-finding skills of language-impaired children. Subjects were four 9- and 10-year-old children, 2 of whom received treatment and 2 of whom did not. All children had been diagnosed as language-impaired and were enrolled in classrooms for children with language-learning disabilities. Treatment consisted of 12 1-hour sessions focused on elaboration only, retrieval only, and elaboration combined with retrieval. All 4 children were tested on picture-naming and free recall tasks before training, 1 week after training, and 1 month after training. Results showed that both subjects in the treatment group improved on the picture naming and free recall tasks from pretest to posttest and delayed posttest, and only 1 of the subjects in the control group showed improvement. In both cases, the improvement of the control subject was less than that of the treatment subjects. Further evidence suggests that activities focusing on both elaboration and retrieval produced the largest gains in performance. No tests of significance are reported, and the authors discuss procedural details that complicate the interpretation of the data.

Ferguson, Eva Dreikurs. (1993, November). Motivational influences on word recognition: IV. Cortical magnification does not explain parafoveal versus foveal differences. *Bulletin of the Psychonomic Society, 31*, 602–604.

Investigates the effect of expanding parafoveal word size (cortical magnification) on word recognition. Due to an apparent ceiling effect in the first experiment, a second was conducted in which the procedures of the first were replicated with more difficult text conditions. Subjects were 32 undergraduates, 16 male and 16 female. Half of the subjects were hungry at the time of testing and half were satiated. Two words were repeated in random alternation to the right or left of center until they were correctly recognized on two consecutive presentations. Visual fields ranged from 2 to 6 degrees from center fixation. Words were categorized as food words, positive emotional words, and negative emotional words. Results indicate that hungry subjects required fewer presentations to recognize a word than did satiated subjects and that high-frequency words were recognized significantly more easily than were low-frequency words.

Gathercole, Susan E., & Baddeley, Alan D. (1990, November). The role of phonological memory in vocabulary acquisition: A study of young children learning new names. *British Journal of Psychology, 81*, 439–454.

Explores the relation between phonological memory and vocabulary acquisition among young children. Subjects were 118 5-year-olds classified as low repetition or high repetition based on the number of correct repetitions they made of 40 nonwords in a phonological memory task. Subjects participated in 2 sessions in which they were to learn labels randomly assigned to toy monsters. The toys were divided into 2 groups and the labels comprised 2 groups, names and nonnames. Results of an ANOVA reveal significant main effects of repetition group and of label type, indicating that high-repetition children learned more quickly than low-repetition children and that names were more quickly learned than nonnames. Further analysis reveals that high-repetition children were faster at learning nonnames, but not names, than low-repetition children. Delayed memory measures produced the same results. The authors conclude that immediate memory processes are directly linked to the learning of new vocabulary for young children; the authors discuss the possible nature of this relation.

GATHERCOLE, SUSAN E.; WILLIS, CATHERINE; & BADDELEY, ALAN D. (1991, August). Differentiating phonological memory and awareness of rhyme: Reading and vocabulary development in children. *British Journal of Psychology, 82*, 387–406.

Determines whether measures of phonological memory and rhyme awareness reflect a common phonological processing skill or differentiable phonological abilities. Subjects consisted of 57 4-year-olds and 51 5-year-olds who were given tests in the following areas: phonological memory, phonological awareness, nonverbal intelligence, vocabulary, and reading. Phonological memory was tested using a repetition of nonwords task and an auditory digit span task. Phonological awareness was measured with a test of rhyme-oddity detection. Nonverbal intelligence was measured using the RPM. Vocabulary was assessed with the short version of the British Picture Vocabulary Scale. Reading was measured with a test of single-word reading and with a multiple-choice test, the France Primary Reading Test. Coefficients of correlation among raw scores on all 7 measures were significant for 5-year-olds, although only some measures were significantly correlated with one another for 4-year-olds. Results of fixed-order multiple regressions controlling for various factors revealed a significant relation between the 2 measures of phonological memory and vocabulary knowledge for both age groups and a significant relation between phonological memory and reading for age 5. In contrast, rhyme awareness scores were found to be related significantly to scores on the multiple-choice reading test at ages 4 and 5 but not to vocabulary at either age.

PEEREMAN, RONALD. (1991, November). Phonological assembly in reading: Lexical contribution leads to violation of grapho phonological rules. *Memory and Cognition, 19*, 568–578.

Reports the results of two experiments that test (1) whether lexical knowledge informs phonological assembly and (2) whether conflicting lexical phonological information from a neighboring letter in a word influences an assembled phonological code. In Experiment 1, subjects were 11 university students who were native French speakers. Subjects were presented with 3 categories of pseudowords containing the letter *g*. Each pseudoword in the first category was identical to a real word except for the vowel following the *g*, and these words were not homophonic with their lexical neighbors (nonhomophonic pseudowords). In the second category, each pseudoword was homophonic with its lexical neighbor if the letter *g* was erroneously pronounced (homophonic-if-erroneous pseudowords). Each pseudoword in the third category was homophonic with its lexical neighbor if the letter *g* was correctly pronounced (homophonic pseudowords). In each category, the experimental pseudowords were matched with control pseudowords. Pseudowords were presented on a video screen and subjects were to pronounce them as quickly as possible. Pronunciation errors and response latencies were recorded. Analyses involved only the pronunciation errors corresponding to the letter *g*. Results of an ANOVA indicate significant differences in the percentage of errors across the 3 categories of pseudowords. Planned comparisons indicated that errors occurred significantly more frequently with nonhomophonic pseudowords than with their controls and also with homophonic-if-erroneous pseudowords as compared to their controls. In contrast, significantly fewer errors occurred with homophonic-if-correct pseudowords than with their controls. Experiment 2 examined whether errors on the letter *g* also occurred when the task did not require an overt pronunciation of the pseudoword.

BROWNE, BEVERLY. (1989, October). Effects of vocabulary difficulty and text length on word definition and prose recall. *Journal of General Psychology, 116*, 385–392.

Examines the effects of vocabulary difficulty and amount of context on word definition and recall of content. Subjects were 136 introductory psychology students. Easy and difficult versions of eight 150-word passages were created by substituting high- or low-frequency

synonyms for existing words. Short and long versions of each type of passage were created, and 2 nouns in each passage were replaced with pronounceable nonwords that appeared 2 to 4 times within each passage and were underlined each time. Passages were presented in 2 sets of 4 with sets and passages counterbalanced. A word definition test, requiring subjects to provide a synonym for the 2 nonsense words in the passage, was given after each passage. Subjects were also asked to list remembered facts from each passage. Word memory was assessed by having subjects respond to a randomized list of nonwords in the study. Results indicate that subjects provided significantly more correct definitions of nonwords when the surrounding vocabulary was simplified and that subjects reading shorter passages tended to remember more about the passage.

FLANNAGAN, DOROTHY A., & BLICK, KENNETH A. (1991, December). Item relatedness and elaborative processing in recall of word definitions. *Perceptual and Motor Skills, 73*, 743–746.

Tests the effectiveness of self-reference and semantic processing when items are related and not related in recall of word definitions. Undergraduate students enrolled in an introductory psychology class were assigned to 1 of 4 conditions: semantic-unrelated (n = 32), self-unrelated (n = 28), semantic-related (n = 24), and self-related (n = 27). Materials consisted of 40 low-frequency words and their definitions, 20 in the unrelated conditions and 20 in the related conditions; in the latter conditions, 5 words each were placed into 4 categories. Students in each of the 4 conditions met twice. In the first meeting, subjects in the unrelated conditions viewed each word and its definitions for 45 seconds each; in the related conditions, each category header was viewed for 45 seconds before subjects viewed the 5 related words and their definitions for 45 seconds each. In addition, one group viewing each set of words was instructed to use each word in a sentence including a third-person pronoun, while the other groups received instruction to use each word in a sentence including the first person pronoun (self-referencing). Subjects were tested on the definitions after 10 minutes and again 1 week later. ANOVA procedures were used in analyzing data. Self-referencing produced greater recall of definitions than did semantic conditions. Mean recall of definitions of unrelated words was higher than that of related words. A significant drop in retention occurred from 10 minutes to 1 week later.

PICOULT, JONATHAN, & JOHNSON, MARCIA K. (1992, January). Controlling for homophone polarity and prime-target relatedness in the cross-modal lexical decision task. *Bulletin of the Psychonomic Society, 30*, 15–18.

Investigates lexical access to ambiguous words with a cross-modal lexical decision task. Subjects were 40 undergraduates who were told to listen and comprehend 81 sentences presented binaurally over headphones. They also indicated whether strings of letters appearing on the visual display screen constituted words. Investigators controlled for homophone polarity and prime-target relatedness of the dominant and subordinate meanings of the homophones. Sentence context biased the dominant meanings of the homophones. The researchers concluded that there was a small priming effect that was consistent across dominant and subordinate conditions and that was not sensitive to polarity.

RYDER, RANDALL J., & GRAVES, MICHAEL F. (1994, November). Vocabulary instruction presented prior to reading in two basal readers. *The Elementary School Journal, 95*, 139–153.

Investigates 6 facets of vocabulary instruction that precede reading as offered by 2 current basal readers. Facets of interest in both basal readers were (1) the goals and description of vocabulary instruction (2) the difficulty of the vocabulary chosen for instruction as com-

pared to that not chosen and the extent to which chosen words could be identified in context (3) the difficulty of the vocabulary chosen for instruction as a function of frequency (4) the methods of vocabulary instruction used in the basals (5) the difficulty of the vocabulary chosen for instruction as determined by the text performance of 59 fourth graders and 57 sixth graders and (6) the ability of 4 instructors to predict pupils' prior familiarity with the words chosen for instruction. Content analyzed were the fourth and sixth grade basals published by 2 companies along with the respective teacher editions and 4 forms of a 30-item vocabulary test along with the test examiner's booklet. ANOVA procedures were applied to the vocabulary test performances of the fourth and sixth graders and the word frequency values of vocabulary identified for instruction in each of the basals. Correlation analysis was applied to teacher estimates of their pupils' knowledge of words and their pupils' actual word knowledge. Findings revealed that one series had a reasonable though brief rationale for its vocabulary instruction and a description of instruction that could be characterized as general. However, the second series provided some rationale but offered little in terms of description. Words chosen for instruction in both basals were words children already know, and teachers' predictions regarding words known by their pupils were generally inaccurate. Furthermore, instruction did not appear to be suitable to the written sentence contexts in which the words occur.

IV–10 Factors in interpretation

IWANAGA, MASAFUMI. (1993, October). Predictions by elementary children of partially presented expository text—The development of expository text schema among 4th grade children. *The Science of Reading*, *37*, 92–101.

Examines the ability of fourth graders to develop expository text schema. Japanese pupils were shown two disconnected portions from an expository text and were asked (1) to predict the intervening connective in the schema, and (2) to appraise predictions about connectives which were different from their own. Findings were interpreted as indicating the following: (1) pupils demonstrated understanding of the introductory portion of the text, but they were not clear in their understanding of the ending portion; (2) pupils regarded expository text as something to describe a solving process; (3) pupils had not attained sufficient cognitive flexibility to cope with predictions that differed from their own.

UMEZAWA, MINORU. (1993, October). Reading of a character's mind through scene description. *The Science of Reading*, *37*, 102–109.

Studies, in Japanese elementary school pupils, the development of the ability to read a literary scene that reflects a character's mood. A total of 530 first through sixth grade pupils read a sentence in which the context suggested the mood of the character and then were asked to select 1 of 2 sentences describing the scene. Findings indicated that an understanding of the character's mood through a description of the scene was possible by grade 4. Children younger than fourth graders tended to be self-centered in their interpretations of the scene. Their reasons for selecting a sentence describing the scene did not reflect its association with the mood of the character but rather with their own preference.

VILLAUME, SUSAN KIDD, & HOPKINS, LINDA. (1995, Spring). A transactional and sociocultural view of response in a fourth-grade literature discussion group. *Reading Research and Instruction*, *34*, 190–203.

Brings together a sociocultural view of learning with a transactional theory in exploring response to literature in a fourth grade literature study group. Participants were 5 fourth grade pupils and a reading specialist who met for literature discussions for about 25 minutes per week.

To prepare for the discussions, each participant was asked to read half a book and to write personal responses to it in log. Meetings consisted of sharing and discussing the log entries. Weekly discussions were preceded by minilessons about discussion strategies. The data for this report are based on 2 videotaped discussions occurring during the fifth and eighth weeks of the study. Additionally, information came from weekly audiotapes, literature response logs, pupils' written comments to questions concerning what they liked and disliked about the discussion groups, and field notes of actual discussions and of the researchers' dialogues about the literature discussions. A coding scheme was developed to analyze moves made by participants signaling a transaction between the text and personal experience. The findings indicated that children's literature responses reflected transactions between the text and the reader, and that they can engage in literature discussions in which talk is used as a vehicle for developing personal evocations and interpretations of text. Documented, too, are descriptions of how the 5 pupils went beyond transactions among text and personal experiences in their interpretation of text. Interpretations included transactions among improvised words stimulated by text and related text words. The segments reported gave examples of how group talk stimulated and served as a scaffold for personal response.

BOARDMAN, GRAHAM, & HUGHES, JOHN. (1994, June). Contexts, reading and drama: The use of predictive sets in the teaching of narrative text. *English in Australia, 108*, 38–46.

Examines whether predictive sets or predictive sets and enactments assist student comprehension of difficult text. Subjects were 42 year 11 students who read a poem under 1 of 3 conditions: Group A listened to the poem and followed along; Group B received predictive sets containing lines from the poem, discussed the quotations, and made predictions about what the poem would be about; and Group C engaged in a drama activity, enactment of the expert, before receiving the same predictive sets given to Group B. All members of all groups read the poem individually and wrote what they thought the poem was about after the text was removed. Each student's piece of writing was analyzed to ascertain how many essential narrative units (narremes) were recalled. Students in Group C were better able to comprehend narrative elements of the text than those in Groups A or B. Group A members recalled 20 narremes; Group B members recalled 31 narremes; and Group C members recalled 44 narremes. Students in Groups B and C wrote more and included more of the text ideas. Students in Group C wrote more, appeared more confident, and used more of an academic register in their writing.

IV–11 Oral reading

CHINN, CLARK A.; WAGGONER, MARTHA A.; ANDERSON, RICHARD C.; SCHOMMER, MARLENE; & WILKINSON, IAN A.G. (1993, Summer). Situated actions during reading lessons: A microanalysis of oral reading error episodes. *American Educational Research Journal, 30*, 361–392.

Seeks the factors that influence each of the three major events in the oral reading error episode: the error, the readers' reaction to the error, and the teachers' feedback to the error. Participants included 3 second grade and 3 third grade teachers and their 116 pupils drawn from 3 different schools. Within each classroom teachers had divided classes into 3 reading ability groups. Each group received 4 lessons involving 4 stories of progressively greater difficulty; beginning with the easiest levels, 1 story was read each day. Stories were taken from basal readers unfamiliar to pupils and were typed so that each was 10 pages long. Pupils were to read 1 page orally; teachers were to choose how and when to offer feedback on any errors. Two word analysis type questions were asked following the reading. Each lesson was videotaped. Five measures were administered to assess comprehension and fluency: (1) com-

prehension subtests of the MAT, (2) comprehension subtests of the Illinois Goal Assessment Program, (3) teachers' ratings of pupil comprehension, (4) time to read 2 passages from the GORT-Revised, and (5) time to pronounce 2 lists of pseudowords. Oral reading errors analyzed included 4 error types (substitutions, nonwords, hesitations, and insertions or omissions), degree of meaning change, and degree of graphophonemic change. Pupil reactions to errors were classified into 7 types; 2 basic types of teacher feedback, terminal and sustaining, were collected. Errors were influenced by the individual reader's comprehension ability, the difficulty of the text, and the teachers' rate of feedback. Readers' reactions were influenced by the same set of factors along with the characteristics of the errors themselves. The patterns of teachers' feedback suggested that they were juggling several goals: maintaining pace, preserving meaning, and helping children who were having difficulty with decoding.

HOFFMAN, JAMES V., & ISAACS, MARY ELLEN. (1991, Summer). Developing fluency through restructuring the task of guided oral reading. *Theory into Practice, 30*, 185–194.

Reports on findings from a current study and reviews past research comparing teacher feedback patterns to oral reading miscues made by children in high-versus low-ability groups. Typically, teachers give terminal type responses to pupils in low-ability groups. For example, they tell them an unknown word or they focus pupil attention on letter sounds in words. On the other hand, teachers generally give high-ability pupils time to think through unknown words or time to self-correct. Findings show that terminal feedback is negatively related to Stanford Achievement Test reading performance and risk taking and self-monitoring feedback is strongly related. As it pertains to problem readers, the authors suggest substituting DRA procedures (recommended for use with instructional level basal reading materials) with a restructured guided oral reading procedure. Such a restructured task has been found to be more beneficial in developing oral reading fluency and comprehension in problem readers.

LIVA, ANGELINE, & PUGH, A.K. (1995, February). Inner speech in young children's reading. *Journal of Research in Reading, 18*, 32–38.

Asks if young children can read silently with adequate comprehension as they perform tasks that require recognition of and discrimination between sounds symbolized by the same letter. Subjects were 84 French children, ages 7 and 8, in the second year of primary school. A short text was prepared that contained 20 words having a letter *a*, pronounced with an open speech sound, and 20 words having a letter *a*, pronounced another way. Assigned in equal numbers to 6 conditions, the children were asked to (1) answer comprehension questions without reading the passage; (2) read the passage and answer comprehension questions; (3) read the passage, underline open *a*'s, and answer comprehension questions; (4) read the passage, underline other *a*'s, and answer comprehension questions; (5) read the passage, underline all *a*'s (open and other), and answer comprehension questions; and (6) underline all *a*'s without reading the text or being cued for comprehension questions that were received at a later time. Evidence of various forms of subvocalization was gathered on each child as the task was performed. A one-way ANOVA showed no significant differences in comprehension among the 5 groups that read the text, with all reading groups excelling significantly over the nonreading group. A one-way ANOVA also showed that no particular reading/underlining task induced significantly more subvocalization behavior.

SCHREIBER, PETER A. (1991, Summer). Understanding prosody's role in reading acquisition. *Theory into Practice, 30*, 158–164.

Reports on a series of studies supporting the notion that prosody is an important perceptual facilitator in sentence segmentation and that prosodic cues to sentence structure are crucial to language acquisition. The relation of prosody and the basic understanding of sen-

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tence structure to the development of oral reading fluency is discussed. Various instructional techniques designed to develop oral reading fluency and comprehension are discussed.

SKINNER, CHRISTOPHER H.; SATCHER, JAMIE F.; BAMBERG, HAROLD W.; WATERS-KEMP, PHYLLIS A.; BRANDT, RHETT; & ROBINSON, DANIEL H. (1995, Spring). Effects of listening previewing across passages written at instructional and frustrational reading levels. *Balanced Reading Instruction, 2*, 16–26.

Examines the differential impact of 3 previewing procedures on oral reading behavior of LD pupils when reading passages at their instructional and frustration levels. Subjects were 14 7th and 8th graders who had been identified as LD in reading. Pupils were presented with passages written at 6th grade (instructional) and 12th grade (frustration) level across 4 experimental conditions. During listening-previewing conditions, children were asked to read passages silently, while a fluent reader read them orally at a fast rate (FRLP) or a slow rate (SRLP), before reading the same passages aloud. During silent previewing (SP) pupils independently read the passages to themselves before reading them aloud; and during assessment alone, they read the passages aloud once without any previewing. Median scores for the number of words correct per minute (fluency) and percentage of errors (accuracy) over passages in each condition were analyzed using two separate 4 × 2 factorial ANOVAs with repeated measures. Findings suggested that the SRLP, FRLP, and SP conditions each excelled over no previewing, but that each had a similar impact on oral reading performance regardless of passage difficulty. Significant effects were noted for passage difficulty with respect to fluency and accuracy, with pupils performing better at instructional level than on frustration level.

NICKELS, LYNDSEY. (1995). Reading too little into reading?: Strategies in the rehabilitation of acquired dyslexia. *European Journal of Disorders of Communication, 30*, 37–50.

Reviews four studies of teaching strategies used in the remediation of acquired dyslexia. Two types of dyslexic patients participated in the studies: (1) deep dyslexics (patients unable to read nonwords aloud, better at reading high- as opposed to low-imageability words, and often making semantic errors while reading orally); and (2) surface dyslexics (patients able to read regular words and nonwords, experiencing difficulty recognizing irregular words, and requiring oral reading in order for comprehension to occur). A variety of remedial teaching strategies requiring oral reading on the part of patients of both types were used in their therapy. Across studies, findings showed that using oral reading as therapy resulted in benefits beyond oral reading improvement for patients of both types.

ZHANG, SULAN, & PERFETTI, CHARLES A. (1993, September). The tongue-twister effect in reading Chinese. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 19*, 1082–1093.

Seeks evidence for phonological processes in normal text reading in Chinese. Two experiments are reported. The purpose of Experiment 1 was to demonstrate a tongue-twister effect (TTE) in both silent reading and oral reading of Chinese. Subjects were 32 graduate students enrolled at 2 U.S. universities, all speakers of Mandarin and from the People's Republic of China. Materials consisted of 16 tongue-twister texts and 16 control texts, each 6 to 8 lines in length. The 2 text types were matched for length, syntax, and semantic content. Tongue-twister texts had a high density of repeated initial phonemes, with 4 sets of phonemes used: alveolar stops, bilabial stops, velar stops, and alveolar fricatives. Four tongue-twister texts were created for each of the 4 sets of phonemes. Subjects were presented texts one sentence at a time on a computer screen. For silent reading, subjects were to write as much as they could remember following the reading. In the oral reading task, participants were to

read aloud as quickly and accurately as possible while being taperecorded. Tongue-twister stories were read significantly slower than control stories in both oral and silent reading. Silent reading times were significantly longer than oral reading times. Reading times for bilabial and alveolar stops were significantly slower than times for velar stops and alveolar fricatives in silent reading, but not in oral reading. Participants made more written recall errors for tongue-twister texts than for control stories. In oral reading, more errors were made in tongue-twister than in control texts. In Experiment 2, subjects had to retain a string of digits while reading a sentence. Results indicated a specific-phoneme interference in that subjects took longer to read the texts when digits and words had the same initial phonemes than when they had different phonemes. It is concluded that the experiments provide evidence that the source of TTE in both Chinese and English is phonological interference rather than visual confusion, thereby confirming the general nature of phonological involvement in skilled sentence reading.

IV–12 Rate of reading

SOLAN, HAROLD A.; FELDMAN, JEROME; & TUJAK, LAURA. (1995, February). Developing visual and reading efficiency in older adults. *Optometry and Vision Science*, *72*, 139–145.

Asks whether reading efficiency of older adults can be improved with appropriate visual training procedures. Subjects were 20 volunteers, ages 62 to 75, who had corrected Snellen visual acuity of at least 20/30, no oculomotor anomalies known to impede reading efficiency, and no ocular disease conditions that altered their acuity. Pre- and posttraining measures of reading efficiency were obtained from eye movement recordings while subjects read a sixth grade level, 100-word selection. Four measures of reading efficiency were assessed: number of fixations per 100 words, mean number of regressions per 100 words, mean span of recognition, and mean reading rate with comprehension. The first group of 8 subjects was given 16 sessions of training followed by a posttraining test; the second group of 12 subjects was given an 8-week nonintervention control period, followed by a postcontrol period test. Eight of the latter group were then given the experimental intervention treatment of Group 1 followed by a posttraining test. Experimental intervention included rapid visual processing and oculomotor and guided reading training in sessions lasting 1 hour each. Training groups showed a significant decrease in mean number of fixations, a significant decrease in the mean number of regressions, a significant increase in average span of recognition, and improved reading rate.

KRISCHER, C.C.; COENEN, R.; HECKNER, M.; HOEPPNER, D.; & MEISSEN, R. (1994, Winter). Gliding text: A new aid to improve the reading performance of poor readers by subconscious gaze control. *Educational Research*, *36*, 271–283.

Reports the results of using gliding text in training courses with second graders in Germany. In gliding text, the text, on a computer screen, moves at an appropriate speed against the reading direction. Subjects consisted of 14 boys and 7 girls identified for remedial classes by the teachers and the headmaster. Children were divided into groups of 4 for 10 training sessions of approximately 15 minutes each. An average increase in reading speed of 10% was reported.

SHIMODA, TODD A. (1993, Winter). The effects of interesting examples and topic familiarity on text comprehension, attention, and reading speed. *Journal of Experimental Education*, *61*, 93–103.

Uses data from a study of the text reading of 24 college students, 16 recruited from senior-level psychology classes and 8 from senior-level civil engineering classes, to determine the effect of interest and topic familiarity on text comprehension, attention, and reading speed. Each subject read 4 text excerpts presented on the computer, 2 from psychology texts and 2 from civil engineering texts. Half the texts were written with interesting examples that had narrativity, vividness or concreteness, and important life themes; and half were written with generic examples that were succinct, without detail, and emphasized parallel semantic relations. Subjects answered questions about their familiarity with the concepts and about the interestingness of the excerpts. Attention was measured as secondary task reaction time, the time taken to react to a tone embedded in the excerpts. Each subject completed 12 true-false questions on each excerpt. After each excerpt, subjects rated topic and excerpt interestingness and readability and answered questions about their familiarity with the topic. On passages determined as interesting, subjects increased attention, reading speed, and reported interest. Familiar topics increased comprehension, speed, and reported interest and topic familiarity.

BREZNITZ, ZVIA; DEMARCO, ANTHONY; SHAMMI, PRATHIBA; & HAKEREM, GAD. (1995, December). Self-paced versus fast-paced reading rates and their effect on comprehension and event-related potentials. *Journal of Genetic Psychology, 155*, 397–407.

Hypothesizes that mature readers can benefit from an acceleration in reading rate and that an increase in rate would be reflected by changes in the relevant event-related potentials (ERTS), which relate to perception and attention. Participants were 15 native English speaking college students, ages 21 to 28. Thirty-four short passages from the Test of English as a Foreign Language (TOEFL) were divided into 2 matched sections each containing a one-line declarative sentence followed by a multiple-choice question. EEGS were recorded and reading time and comprehension data collected as subjects read at their self-selected pace the first 17 passages presented on a computer screen. The second 17 passages were then presented on the computer screen at the fastest rate attained during the reading of the first passages. In the fast-paced condition, subjects read 12% faster than they normally did and comprehension scores showed a mean increase of 21.8%. A negative correlation coefficient was obtained between reading time and comprehension, indicating that subjects who read faster comprehended more. ERP waveforms revealed differences in evoked responses to slow- and fast-paced conditions and in comprehend and not-comprehend trials.

IV–13 Other factors related to reading

FREEMAN, CAROLE COOK. (1994). *A literate community: Common threads and unique patterns in teaching and learning*. Lanham, MD: University Press of America.

Reports on several aspects of data collected in one fourth grade classroom: (1) the opportunities for the teaching and learning of reading and writing, (2) the characteristics of the thinking and talking about texts, (3) the patterns of thinking and talk and how they were seen in the classroom and library, and (4) how individual children fared. Data were collected during a 9-week period and involved observations in the classroom and library of a private school, as well as interviews and conversations with the two teachers, audiotapes of lessons, field notes, and copies of documents such as homework assignments and teacher and pupil writing samples. There were 15 children in the class, 7 of whom were focal for the study, with case studies presented on 4 of the focal group. Patterns and themes were identified for the relations among various literacy learning events. Children had many opportunities to read, write, and talk about texts. The same texts were used by children in different settings with different discourse partners, offering opportunities to clarify and extend their understanding of the

text. Literacy in the classroom was shaped by interactions with teachers and peers as well as by transactions with texts. Two types of unique patterns emerged, one curricular and one related to the patterns of literacy learning for individuals. The author offers implications for teaching and curriculum based on the findings of the study.

ALVERMANN, DONNA E.; YOUNG, JOSEPHINE PEYTON; WEAVER, DERA; HINCHMAN, KATHLEEN A.; MOORE, DAVID W.; PHELPS, STEPHEN F.; THRASH, ESTHER C.; & ZALEWSKI, PATRICIA. (1995, June/July). Students' perceptions of text-based discussions: A multicase study. *Reading Today*, *12*, 37.

Explores how students talk about texts in their content classes. Subjects, more than 100 middle and high school students, were videotaped as they interacted with their classmates in small and large group discussions throughout the year. Students then watched the videotapes and described what they saw happening. Videotapes were exchanged across sites so that students could observe and comment on other students' discussions. Examination of comments produced 3 assertions that applied across 5 classroom sites: (1) students said that discussions helped them understand what they read, (2) students believed that certain conditions were conducive to discussions, and (3) students said topics and tasks influenced their participation in discussions about texts. Implications for classrooms are included.

DOUGLAS, SHEILA, & WILLATTS, PETER. (1994, September). The relationship between musical ability and literacy skills. *Journal of Research in Reading*, *17*, 99–107.

Studies the relation between musical ability and literacy skills for 78 children enrolled in their fourth year in primary school in one town in Scotland. Subjects took the British Picture Vocabulary Scale (BPVS), the Primary 4 Aural Awareness Test, and the Schonell Reading and Spelling Tests. Significant coefficients of correlation were found between the following: vocabulary scores and scores on the other measures, pitch and scores on the other measures, rhythm and reading, and rhythm and spelling. The researchers suggest that intellectual ability may be responsible for the relations found. With vocabulary partialled out, rhythm still correlated significantly with reading and spelling, but pitch was no longer significant The researchers suggest the use of providing music training for children identified as having reading difficulties. Data from a pilot intervention with 12 children suggested that scores were higher at the conclusion of the intervention and that training in musical skills might be effective.

OLDFATHER, PENNY. (1995). Commentary: What's needed to maintain and extend motivation for literacy in the middle grades. *Journal of Reading*, *38*, 420–422.

Summarizes some key ideas from a longitudinal study of pupils' intrinsic motivation for literacy learning. Findings come from a 4-year longitudinal study with elementary school children followed into junior high school. It was found that when pupils had opportunities for authentic self-expression in their literacy activities, they were more intrinsically engaged in learning. In some junior high classrooms, discussions were teacher centered and focused on whether children had basic knowledge of factual information rather than on giving children opportunities to express themselves, exchange ideas, express opinions, or think together about issues and problems.

FISHMAN, ANDREA E. (1992, May). Ethnography and literacy: Learning in context. *Topics in Language Disorders*, *12*, 67–75.

Discusses two case studies to show how context influences literacy. Studied were 2 eighth grade boys attending different schools in southeastern Pennsylvania. A portfolio documented each boy's literacy. Ethnographic contextualization was used to interpret various products by each boy in light of the setting, background, and climate within which it was produced. It was concluded that the boys' performances were influenced significantly by what

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they have been taught, what they care and do not care about, who they know, and to whom they know how to relate.

KAIL, ROBERT, & HALL, LYNDA K. (1994, November). Processing speed, naming speed, and reading. *Developmental Psychology, 30*, 949–956.

Evaluates the relation among processing speed, naming speed, and reading skill for 8- to 13-year-old children. Twelve subjects at each age level, 8 to 13, were administered measures of global processing time, naming time, and reading ability. Processing speed was assessed with 3 tasks; naming time was assessed with 3 types of stimuli (digits, letters, and colors); and the reading recognition and reading comprehension components of the PIAT were administered to assess reading skill. Path analyses and structural-equation modeling were used in analyzing results. Naming time was predicted by measures of processing speed but not by age. Naming time and age were linked to reading recognition. The latter, in turn, was linked to reading comprehension.

JURDEN, FRANK H., & REESE, HAYNE W. (1992, September). Educational context differences in prose recall in adulthood. *Journal of Genetic Psychology, 153*, 275–291.

Studies the relative contribution of age, working memory, and educational status on processing of syntactically complex prose. Participating in the study were 36 women assigned to 1 of 3 groups on the basis of age and educational status. Twelve were in-school young women (M = 21.6 years), 12 were out-of-school young women (M = 21.4 years), and 12 were older women (M = 70.3 years). Subjects each completed a survey of their educational and employment experiences. They were each administered the vocabulary subtest of the WISC-R and 2 memory span tasks (1 for digits and 1 for sentences). They also read narratives controlled for various syntactically complex structures and produced written protocols of all they could recall. Protocols were scored for recall of propositions from each type of syntactic construction included as well as propositions not included (intrusions) in the narratives. ANOVA and hierarchical regression analyses performed on the data indicated that performance was influenced by educational status, with in-school young women surpassing the other 2 groups in working memory. Working memory accounted for a significant portion of written recall variance, although age was not predictive of syntactic structures with left branch embeddings when controls for differences in working memory were implemented.

IV–14 Factors related to reading disability

SHAYWITZ, SALLY E.; ESCOBAR, MICHAEL D.; SHAYWITZ, BENNETT A.; FLETCHER, JACK M.; & MAKUCH, ROBERT. (1992, January). Evidence that dyslexia may represent the lower tail of a normal distribution of reading ability. *The New England Journal of Medicine, 326*(3), 145–150.

Uses data from the Connecticut longitudinal study of 414 children followed as a cohort from kindergarten to investigate the hypothesis that dyslexia follows a normal continuum rather than a bimodal distribution in the population. Children were identified as dyslexic on the basis of the discrepancies between scores of intellectual functioning (WISC-R) and reading achievement, as measured by scores on standardized tests (Woodcock-Johnson). Data were available from intelligence tests in grades 1, 3, and 5, and from yearly achievement batteries. For each child, 108 possible discrepancy scores were determined. The researchers concluded that a normal distribution model fits the data well, since only 9 scores of the 108 were different than what would have been expected. It was felt that dyslexia occurs along a continuum of reading ability, with dyslexic students representing the lower portion of that continuum rather

than a discrete entity or category. Stability of identification is also questioned, since children were not consistently identified as dyslexic over time. Implications for policy and practice related to dyslexia and to identification and treatment of dyslexic children are included.

DOBBINS, D. ALAN. (1994, November). Expected reading scores for pupils in years 3 to 6. *British Journal of Educational Psychology, 64*, 491–496.

Presents a process for identifying readers as underachievers or low achievers, using tables of expected reading scores. Scores were calculated on a sample of 1,519 pupils in years 3 to 6 using CA and Raven's Progressive Matrices scores as predictor variables and National Foundation for Educational Research-Reading Test BD (NFER BD) scores as the reading distribution. Comparisons of expected scores with attained scores on the NFER BD identify the pupil's relative achievement in reading and help to determine whether the child is a low-achieving or underachieving reader. The researcher suggests caution in use of the procedures.

VAN IJZENDOORN, MARINUS H., & BUS, ADRIANA G. (1994). Meta-analytic confirmation of the nonword reading deficit in developmental dyslexia. *Reading Research Quarterly, 29*, 266–275.

Performs a quantitative meta-analysis on a database previously analyzed by a narrative review in order to replicate, test, and extend the findings and speculations that dyslexic children have a specific deficit in phonological reading processes. Sixteen studies were included in the meta-analysis, all taken from the previous review and all meeting 2 criteria: (1) nonword reading was used in assessing phonological reading skill, and (2) the studies were based on the reading-level-match design. The studies included 1,183 subjects, of whom about half were dyslexics. Results supported the conclusion reached in the narrative analysis that there is evidence for the phonological deficit hypothesis. Approximately half a standard deviation difference was found between dyslexics and the reading-level-matched controls on the nonword reading task, but no difference was found in word recognition between the 2 groups. However, less than 6% of the variance in the explanation of dyslexia was contributed by the nonword reading deficit. The major weakness noted in the studies examined was in the adequacy of the matching procedure in terms of differences in age and intelligence and in word recognition ability rather than in the type of test, the age of the normal readers, or the dyslexics' participation in special remedial programs.

COLE, PETER G., & MENGLER, ELISE D. (1994, October/December). Phonemic processing of children with language deficits: Which tasks best discriminate children with learning disabilities from average readers? *Reading Psychology, 15*, 223–243.

Investigates the levels of phonemic awareness that accounted for differences when 15 children with LD were compared with 15 children of average reading ability of the same CA and with 15 younger children with the same RA levels as the LD children. All 3 groups were assessed on 3 levels of phonemic awareness represented as a hierarchical set: awareness of onset and rime, simple phonemic awareness (phoneme segmentation), and compound phonemic awareness (phoneme deletion). Compared with the RA group, the LD group performed significantly worse only on the first level of phonemic awareness, the awareness of onset and rime. Thus, only the task of detection of rhyme and alliteration distinguished the older LD group from the younger group matched on RA. Results of a stepdown analysis revealed that compared with the CA matched group, the LD group performed significantly worse on compound phonemic awareness, even after the other tasks had been partialled from the analysis. The stepdown results indicated that the separate measures of phonemic awareness did not overlap.

BERGHOFF, BETH. (1994). Multiple dimensions of literacy: A semiotic case study of a first-grade nonreader. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multi-*

dimensional aspects of literacy research, theory, and practice (pp. 200–208). Chicago, IL: National Reading Conference.

Presents a case study of one first grade nonreader, David, as he participated in a literacy classroom focusing on multiple sign systems. In this first grade urban classroom, the teacher collaborated with the researcher in creating an environment that gave equal time and emphasis to a wide array of sign systems (art, music, drama, dance, language, and mathematics). All 18 children in the classroom were reading and writing within the normal range at the end of the year except David. David's profile was constructed using 15 videotaped class segments, written work, artwork, transcribed conversations, field notes, notes from his mother, written reflections, and photographs. Analyses focused on sign systems, conceptual change, inquiry, and the interaction of the 3. Perceptible changes in David's literacy development were noted every few months. Viewed through a semiotic perspective, David appeared successful because he developed an inquiry stance toward multiple sign systems (reading, writing, art, and drama). However, David stood out as unsuccessful based on other literacy definitions, because he did not achieve the minimum competency standards set by the state.

VALDOIS, SYLVIANE; GÉRARD, CHRISTOPHE; VANAULT, PATRICIA; & DUGAS, MICHEL. (1995). Peripheral developmental dyslexia: A visual attentional account? *Cognitive Neuropsychology, 12*(1), 31–67.

Studies one child with developmental dyslexia stemming from dysfunction of the visual processing system. The subject was a 10-year old, French-speaking female reading considerably below her measured verbal ability. Psychological, neurological, and reading/writing performance measures were administered. This child, with slow reading speed, generally displayed word misidentification regardless of the frequency, length, spelling regularity, or lexical dimensions of the printed word stimulus. Conversely, errors of a semantic nature were relatively few in occurrence. The problem was considered to reside in the area of attentional processes that modulate word recognition.

HURFORD, DAVID P., & SANDERS, RAYMOND E. (1995, January). Phonological recoding ability in young children with reading disabilities. *Contemporary Educational Psychology, 20*, 121–126.

Asks if visual intervention strategies enhance auditory phonological processing of RD children. Ten second-grade children with RD participated in this study. Auditory training items were reinforced with visual analogs. Pre- and posttest measures of auditory phonological processing were compared through repeated measures ANOVA. Results showed items having visual analogs significantly improved auditory processing of RD children.

BOWEY, JUDITH A.; CAIN, MARY T.; & RYAN, SHARON M. (1992, August). A reading-level design study of phonological skills underlying fourth-grade children's word reading difficulties. *Child Development, 63*, 999–1011.

Studies phonological analysis, verbal working memory, and pseudoword reading performance of 16 skilled and 16 less skilled fourth grade children and 16 second grade children matched to the less skilled fourth graders on word identification performance. Materials used were the PPVT-R, the word identification and word attack subtests of the WRMT-R, the digit span subtest of the WISC-R, and 2 pairs of phonological oddity tasks, an onset and rime oddity task and a phoneme oddity task. Children were tested individually in 5 sessions over 10 weeks. Tasks were presented in a counterbalanced order with each oddity task preceded by practice trials in which subjects received corrective feedback. Less skilled fourth graders (1) obtained lower vocabulary scores than the skilled CA group, (2) were equivalent in vocabulary abilities to the skilled second grade group, (3) performed at a lower level than the CA and read-

ing level controls on the phonological oddity and pseudoword tasks, and (4) performed at the same level as skilled second graders on a test of verbal working memory. Skilled fourth graders scored higher than CA and reading level controls on verbal working memory. The researchers suggest that phonological analysis skills are more significant than are verbal working memory skills for children's decoding processes.

ROMANI, CRISTINA, & STRINGER, MARK. (1994, October). Developmental dyslexia: A problem acquiring orthographic/phonological information in the face of good visual memory and good short-term memory. *Brain and Language, 47*, 482–485.

Presents a case study of a developmental dyslexic whose spelling performance fits the description of surface dysgraphia and who performed poorly when learning new orthographic/phonological information. The patient was a 21-year-old college student who had been diagnosed as a developmental dyslexic at the age of 10 by British school authorities. His visual memory was good, and he had no difficulty learning new semantic or visual information. His reading of text, single words, and nonwords were all good. Spelling showed good application of phoneme-grapheme conversion rules but showed poor orthographic representations. On the Wechsler Memory Scale, he showed difficulty with the backward digit span task. He had difficulties in learning both spoken and written words, but did well learning Russian words, which he could only remember as visual shapes. It is contended that because the subject had normal visual long-term memory and normal visual and phonological short-term memory, it is unlikely that any memory impairment was the cause of his learning disability. One possible explanation offered for his learning problem was to hypothesize a distinction between memory resources that passively retain phonological information and an encoding mechanism that represents the relative order of the units of a sequence. An impaired sequencing mechanism could be used to explain why the subject has difficulty learning linguistic material but not semantic or visual information. It is suggested that the subject's learning difficulties are not caused by poor memory resources but by an encoding difficulty.

ESPIN, CHRISTINE A., & DENO, STANLEY L. (1993, Fall). Content-specific and general reading disabilities of secondary-level students: Identification and educational relevance. *Journal of Special Education, 27*, 321–337.

Tests whether text-based reading measures can be used to distinguish between 2 subtypes of reading disability: (1) general disabilities, reading-related problems that appear to be a function of widespread reading difficulties across content areas; and (2) content-specific reading disabilities, reading difficulties restricted to a specific content area. Participants were 121 tenth grade students from a rural high school; of these, 10 were receiving special education services. Students completed a series of tasks in both English and science: (1) background knowledge vocabulary tests, (2) prestudy text-based reading passages, (3) a classroom study task, and (4) poststudy text-based reading passages. Text-based reading passages were selected from school content area texts on the basis of difficulty level and perceived level of interest. The classroom study tasks included a short story for English and a 900-word passage on rhythmic patterns of organisms for science. Students were asked to read and study the content area materials and to answer multiple-choice questions on them. The number of correctly answered questions was scored and analyzed for the vocabulary and study tasks. Text-based reading passages were audiotaped and the number of words read aloud correctly in 1 minute was recorded. The discrepancy in reading aloud performance from the prestudy English and science texts was used to formulate 2 subgroups: students with general reading deficits (low scores in both content areas) and students with content-specific deficits (reading scores substantially higher in English than in science). Findings yielded a group of 33 students with general deficits and 6 with content-specific deficits. The 2 groups were then

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compared on their poststudy reading performances of the science passage. Scores for the content-specific group were significantly higher than those for the general-deficit group. Further analyses supported the hypothesis that the content-specific deficits were a function of lack of background knowledge. It was felt that reading from text could be used by teachers as a diagnostic tool in identifying educationally relevant subtypes of students with learning difficulties in content areas.

SHAFRIR, URI, & SIEGEL, LINDA S. (1994, November). Preference for visual scanning strategies versus phonological rehearsal in university students with reading disabilities. *Journal of Learning Disabilities, 27*, 583–588.

Studies differences in strategic preferences and response latencies of university students with reading disabilities compared with nondisabled readers on a task in which either visual or phonological strategies lead to the correct response. Subjects were 47 Canadian university students, 35 of whom had applied to the university LD program. Of these, 20 reported current difficulties in reading, along with difficulties in learning to read in first and second grades (RD group); the other 15 reported no recollection of problems in the beginning stages of learning to read (LD group). The 12 nondisabled readers served as controls. Subjects were given a computer-based matching task with 54 trials, 18 in each of 3 types of stimuli: words, nonwords, and symbol strings. Accuracy scores and response latencies for each trial were recorded. Verbal reports of strategies used were collected also. Most controls reported using a strategy of phonological rehearsal for both words and nonwords, while most RD subjects consistently used a strategy of visual scanning. Controls responded significantly faster than did the RD and LD groups to all 3 types of stimuli.

MOORE, LAWRENCE H.; BROWN, WARREN S.; MARKEE, TARYN E.; THEBERGE, DAVID C.; & ZVI, JENNIFER C. (1995, June). Bimanual coordination in dyslexic adults. *Neuropsychologia, 33*, 781–793.

Compares the performance of 21 dyslexic adults, ages 18 to 40, and 21 controls on a test of tactile-motor coordination and interhemispheric collaboration, the Bimanual Coordination Task (BCT), which uses a modified Etch-A-Sketch toy. All subjects were screened for handedness, health factors, intelligence, and reading ability. Subjects performed both unimanual and bimanual tasks in timed and untimed trials. One task was completed without the help of visual feedback, with subjects relying only on their tactile and kinesthetic movements. Time of task completion and length of line drawn by a cursor were scored. Subjects also completed a rhyme fluency test to measure phonological processing ability. Analyses were run for bimanual scores and for correlation coefficients between BCT performance and performance on the rhyme fluency test and performance on the block design subtest of the WAIS-R. Dyslexics were slower and had different performance patterns in bimanual motor coordination when visual feedback was and was not present. Dyslexics had greater difficulty when the left hand had to move faster than the right and when the hands had to make mirror image movements. Accuracy on the BCT was significantly correlated with the scores on the block design subtest, but not with the scores from the rhyme fluency test. The researchers suggest that left hemispheric dysfunction is not supported by the data, but rather that deficit in bilaterally coordinated motor activity is related to dysfunction in the right hemisphere, the corpus callosum, or both.

MACARUSO, PAUL; SHANKWEILER, DONALD; BYRNE, BRIAN; & CRAIN, STEPHEN. (1993). Poor readers are not *easy* to fool: Comprehension of adjectives with exceptional control properties. *Applied Psycholinguistics, 14*, 285–298.

Investigates the relative contribution of syntactic knowledge and memory processing abilities on poor readers' comprehension of sentences containing object-controlled adjectives.

English speaking second graders from the United States and Australia served as subjects. Performance on the Decoding Skills Test was used to classify subjects as either good or poor readers. Sentences containing object-controlled adjectives were then read to the subjects, and their understandings of them were evaluated via two tasks: an act-out task, and a sentence-picture matching task. Results of analyses applied to the data from both tasks showed that young, poor readers were no more delayed or advanced than young, good readers in terms of syntactic knowledge required for comprehension of sentences containing object-controlled adjectives. Neither did the differing memory processing demands imposed by the two tasks affect comprehension of the sentences differentially. Both the good and poor readers performed similarly on both tasks.

RASKIND, MARSHALL H., & HIGGINS, ELEANOR. (1995, Spring). Effects of speech synthesis on the proofreading efficiency of postsecondary students with learning disabilities. *Learning Disabilities Quarterly, 18*, 141–158.

Studies the effects of speech synthesis on the proofreading efficiency of 33 students with learning disabilities. Subjects, 19 males and 14 females, ages 19 to 37, were receiving support as LD students at a large university. Subjects generated a first draft of a 3- to 5-page composition on a topic of their choice. A sample of 7 essays were then read by a panel of specialists in LD and experts in English to determine categories of errors commonly made by the students. Nine categories emerged and were subsequently used to score the subjects' essays. During a second session, subjects proofread their entire essay under each of 3 conditions: speech/synthesis/computer screen review; another person reading the text to them; and no assistance. In the speech synthesis condition, subjects controlled the computer screen, indicating whether they wanted word, line, sentence, or paragraph reviewed; whether they wanted to highlight text; whether they wanted portions read to them; and whether they wanted to modify screen or background colors for maximum contrast and readability. Total number of errors found by each subject was divided by the number of errors found by the raters. Percentages of errors were calculated for each of the categories and for each of the 3 conditions. Students found more of the total errors in the speech synthesis condition than in either the read-aloud or no assistance condition. In 7 of the 9 categories, more statistically significant errors were found using the speech synthesis condition than the other conditions. Highest number of errors detected were in spelling. Possible reasons for differences are included as are implications for programs for postsecondary LD students.

DONMOYER, ROBERT, & KOS, RAYLENE. (1993). At-risk students: Insights from/about research. In Robert Donmoyer & Raylene Kos (Eds.), *At-Risk Students: Portraits, Policies, Programs, and Practices* (pp. 7–35). Albany, NY: State University of New York Press.

Reviews the research on at-risk students. In particular, the literature related to 2 questions is analyzed: (1) What characteristics and conditions place children at risk? and (2) What types of programs can best meet the needs of at-risk students? It is noted that the research literature provides only limited responses to each question. Of the 2 questions, the second more readily lends itself to variables that can be somewhat controlled. From the literature review, 5 ideal types of programs and practices are identified and discussed: (1) supplemental programs, (2) whole-school restructuring programs, (3) therapy programs, (4) intervention team approaches, and (5) community/home/school partnership programs. A portion of the chapter is devoted to examining, identifying, and accounting for confusions in the research on program and practice effects. One of the confusions is due to the use by investigators of differing dependent variables and indicators of success.

KOS, RAYLENE. (1993). "Nobody knows my life but me!" The story of Ben, a reading disabled adolescent. In Robert Donmoyer & Raylene Kos (Eds.), *At-risk students: Portraits, policies, programs, and practices* (pp. 49–78). Albany, NY: State University of New York Press.

Provides a case study of an at-risk student who is poor, black, male, a bit hyperactive, the victim of a troubled home life, and a problem reader. Ben, age 15 at the time, appeared disinterested in school and in learning to read. He had been placed in special classes due to processing deficits and hyperactivity. Possible problems interfering with his learning are discussed and include his lack of sociolinguistic competence in the classroom. His black dialect and his lack of knowledge of the meanings of words encountered in text appeared to be problems interfering with his reading and learning. His response to good children's literature became a focal point of his tutoring in reading.

BARONE, THOMAS. (1993). Ways of being at risk: The case of Billy Charles Barnett. In Robert Donmoyer and Raylene Kos (Eds.), *At-risk students: Portraits, policies, programs, and practices* (pp. 79–88). Albany, NY: State University of New York Press.

Presents a case study of a 15-year-old, rural Tennessee boy identified as being at risk. Billy Charles was in his second year in seventh grade and had voiced his intention to drop out of school as soon as possible. He had been placed in a special education class because he had been disruptive in other classes. The author argues through the case of Billy Charles for the need to introduce meaning into the life of the classroom.

DAHL, KARIN L. (1993). Ellen, a deferring learner. In Robert Donmoyer and Raylene Kos (Eds.), *At-risk students: Portraits, policies, programs, and practices* (pp. 89–101). Albany, NY: State University of New York Press.

Examines, in a case study, the literacy learning events in the first 2 years of school for Ellen, an inner-city learner who seemed to lose interest in reading and to lose faith in herself as a reader during the first grade. Ellen was identified in a larger 2-year ethnography analyzing reading and writing knowledge of inner-city learners in 3 urban schools. The assessment of written language conducted during the early weeks of kindergarten indicated that Ellen knew the purpose of printed text, recognized some environmental print, knew a little about the macrostructure of stories, and scored at the fourth stanine on the Concepts of Print test. Spelling ability showed a beginning interest in letter-sound relations; she had little experience with the language of storybooks. Her kindergarten curriculum is described as a traditional reading readiness program. She attended carefully to the directed-instruction portion of kindergarten, and by the end of the year had command of all letters and knew some sounds and several sight words. She scored in the ninth stanine on the MAT in reading. The curriculum in grade 1 was based on a basal reader program. As the first grade year progressed, Ellen's difficulties in sight word recognition and phonic skills increased rapidly and she became discouraged. She took fewer risks, avoided reading, and attempted to memorize rather than to move toward phonemic awareness and other strategies. Ultimately she lost confidence in her own language knowledge.

FORD, KAREN L. (1993). Andy and Libby: At risk or undervalued? In Robert Donmoyer & Raylene Kos (Eds.), *At-risk students: Portraits, policies, programs, and practices* (pp. 103–110). Albany, NY: State University of New York Press.

Describes 2 pupils followed through their seventh and eighth grades, both of whom are identified as children who challenge conventional assumptions about at-risk pupils. Both appeared to be motivated and to have some strategies to deal with school literacy tasks. In Libby's case, she appeared to be overly dependent on teachers and peers. The school placed an

emphasis on getting the right answers, thereby reinforcing her dependency on following teachers' directions. Andy had developed a means of operating, which for him was successful, in an environment in which homework was assigned even when it was not needed. The author raises the question of whether schools that ask both too little or too much put all students at risk in some way.

KOS, RAYLENE. (1993). Karen: An interaction of gender role and reading disability. In Robert Donmoyer & Raylene Kos (Eds.), *At-risk students: Portraits, policies, programs, and practices* (pp. 111–117). Albany, NY: State University of New York Press.

Presents a case study of a reading disabled girl. Karen, a 14-year-old African American middle school student, began experiencing reading difficulties in the first grade. Her sixth grade standardized test results revealed her reading to be below grade 2 level. Although placed in regular classes in middle school, she was reading independently at the preprimer level. Karen is described as quiet, kind, likable, polite, and one who never drew attention to herself. Although both teachers and Karen were aware of her reading difficulties, no one addressed the problem. Her case is viewed as an interaction of teacher expectations with stereotypical gender role behavior. It is felt that her stereotypical behavior may be a means of ensuring social acceptance by females who are not achieving well in school.

IV–15 Sociocultural factors and reading

ALMASI, JANICE F. (1994). The effects of peer-led and teacher-led discussions of literature on fourth graders' sociocognitive conflicts. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 40–59). Chicago, IL: National Reading Conference.

Explores and describes the nature of episodes of sociocognitive conflict among fourth graders in peer-led and teacher-led discussions of narrative text. Ninety-seven fourth graders and 6 classroom teachers participated in the 11 week study. Teachers were trained to implement both teacher-led and peer-led conditions to 2 heterogeneous groups of average and below average readers in their classrooms. Groups were matched on reading comprehension and showed no difference in their ability to recognize and resolve conflicts prior to the study. Treatments were randomly assigned to each group within each class for a 9-week period. Each condition followed the same daily sequence yet differed in peer- versus teacher-led discussions of the basal selection. The 12 stories used were counterbalanced by teacher and treatment. Weekly discussions were videotaped and served as a primary source of data. Individual administration of the Cognitive Conflict Scenario Task (CCST) measured how well pupils recognized and resolved episodes of sociocognitive conflict during hypothetical classroom scenarios. Key informant interviews (2 pupils from each discussion condition) were conducted twice during the study. The constant-comparative method was used to examine the nature of episodes of sociocognitive conflict observed in the videotapes. Discourse analysis was also conducted for language use, complexity, initiation patterns, and maintenance. ANOVA procedures were employed with the CCST scores. Overall 306 episodes of sociocognitve conflict were identified in all 36 discussions. No significant differences among the number of episodes of conflict were found between the peer-led and teacher-led discussions. Conflict within self, with others, and with text emerged as categories. Peer-led discourse consisted of language that was significantly more elaborate and more complex than the discourse that characterized the teacher-led group. Children in peer-led conditions were better able to recognize and resolve episodes of sociocognitive conflict than their teacher-led counterparts.

SCHMIDT, PATRICIA RUGGIANO. (1995). Working and playing with others: Cultural conflict in a kindergarten literacy program. *The Reading Teacher, 48*, 404–412.

Examines the effects of informal social interaction on the literacy acquisition of 2 ethnic minority children enrolled in a predominantly white suburban kindergarten program. One South Asian female and one East Indian male were observed within their classroom setting as they participated in a half-day literacy program over a 1 year period during 3 hour sessions 2 or 3 times a week. Data compiled on the subjects during the span of the study consisted of observational notes; evaluations of classroom materials; field notes from home visits; structured interviews with the parents, educators, and the children; and documents pertaining to the children's performance such as student work, report card, and testing information. Constant comparisons of the data revealed recurrent patterns of classroom work and play experiences that produced demonstrable social struggles for the minority culture children in this setting. Various examples of conflict and misunderstandings that arise from cultural difference and their effects on literacy acquisition of minority culture children are discussed.

ALTIERI, JENNIFER L. (1995, January/March). Multicultural literature and multiethnic readers: Examining aesthetic involvement and preferences for text. *Reading Psychology, 16*, 43–70.

Examines the role of culture in pupils' aesthetic involvement with text and preference for stories. Two hundred forty children in 6 fifth grade and 6 seventh grade classes in the same school district listened to 6 stories representing different cultures: African American, Hispanic, and white. Of the total number of children, 163 were white, 36 were African American and 41 were Hispanic. After each story was read to them, subjects wrote a free response and rated the story on a scale from 1 to 5. Level of aesthetic involvement was not significantly influenced by the culture of the subject or text. Fifth graders preferred white stories, and seventh graders preferred African American texts. Subjects of minority cultures preferred stories portraying their own culture, and white subjects were more homogeneous in their preferences for stories representing different cultures. It was concluded that although subjects of different ethnicities prefer stories reflecting their own culture, they are capable of complex aesthetic transactions regardless of culture portrayed.

WEINBERGER, JO. (1994) Children's early literacy experiences at home, the role of parents, and children's subsequent literacy development. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 86–92). Cheshire, England: United Kingdom Reading Association.

Reviews findings from a longitudinal study that explored the literacy experiences and attainment of 42 children, ages 3 to 7, who attended an urban nursery school in northern England. Children were either from working class families ($n = 27$) or middle class backgrounds ($n = 15$). Data sources included parent interviews before entry; literacy assessment at school entry and when children were age 7; and parent, teacher, and child interviews when children were age 7. The author reports on children's literacy development at each stage, the role of parents, and how early literacy experiences relate to later achievement. The strongest predictors of children's literacy development at 7 were measures of children's literacy level at school entry. Home factors that were significant predictors were those supported by other studies in the field such as access to books, shared reading experiences, and directing attention to environmental print. Whether a child had a favorite book was identified as a significant predictor of later literacy development, a link not made by previous studies. The extent of home literacy experiences for the majority of children was barely recognized or acknowledged by school literacy programs.

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PAYNE, ADAM C.; WHITEHURST, GROVER J; & ANGELL, ANDREA L. (1994). The role of home literacy environment in the development of language ability in preschool children from low-income families. *Early Childhood Research Quarterly, 9,* 427–440.

Examines the relation between home literacy environment and the language ability of preschoolers from low-income families. Primary subjects were 236 children from Head Start centers and their caregivers; secondary subjects were 87 children from the same centers whose primary caregiver did not complete an IQ test. The final sample consisted of 90% of the total enrollment of 4-year-olds at the 5 centers. The primary caregiver of each family was surveyed with the Stony Brook Family Reading Survey, a 52 multiple-choice item questionnaire with 9 questions focused on the literacy environment in the home. Children's language abilities were assessed with the PPVT-R and the Expressive One Word Picture Vocabulary Test. Educational level of the primary caregiver was determined by self-report; caregiver IQ was obtained using an adaptation of the Quick Test. Simple regression, hierarchical regression, and canonical correlation analyses were employed in analyzing the data. Home literacy environment was found to account for 18.5% of child language in simple correlation, 12% with the effects of caregiver IQ and education removed in a hierarchical regression. Low coefficients of correlation were found between adult reading practices and child language ability. Substantial variability was found in the home literacy environments of these low-income homes.

DEBARYSHE, BARBARA D. (1995, January/March). Maternal belief systems: Linchpin in the home reading process. *Journal of Applied Developmental Psychology, 16,* 1–20.

Evaluates, in 2 studies, a causal model of the predictors and outcomes of parent-child book reading practices. Studies 1 and 2 involved 60 low-income and 56 working class children, respectively. Most subjects were African American. Predictors were sex, SES, level of maternal literacy, maternal beliefs about reading aloud, frequency and quality of reading interactions, children's interest in reading, and children's oral skills. Path model analyses revealed mothers' educational levels and economic resources were positively related to maternal reading belief systems. Mothers' beliefs were highly predictive of the degree to which they exposed their children to shared book readings and to the quality of their shared book interactions. Children's interests in books were also highly related to maternal beliefs about the value of reading. Levels of oral language ability were not significantly related to reading practices in this study.

GOLDENBERG, CLAUDE; REESE, LESLIE; & GALLIMORE, RONALD. (1992, August). Effects of literacy materials from school on Latino children's home experiences and early reading achievement. *American Journal of Education, 100,* 497–536.

Studies home contexts that influence the frequency, quality, and effects of learning opportunities prompted by different early literacy materials sent from school. Specifically, areas of interest were how much impact the school had on the home literacy experience, how the home responded to the materials sent by the school, and what the effect was of the different materials on the children's kindergarten literacy development. From a larger study, 10 children were selected. All participated in a bilingual instructional program and had Spanish as their home language. Families in the experimental classes were given copies of storybooks, each a predictable text of approximately 10 pages, which were previously used in the school. Families in the control classes received packets of worksheets with letters and syllables. Homes were visited once or twice monthly during the year. Parents were interviewed about their learning and their observations and opinions of their children's learning. Of the 456 learning events determined, 37 hours involved the use of print in some way. Over 40% of the

literacy events involved materials that came from the school. Cultural values and goals of the adults in the home contributed to the effect of the home literacy. Parents' views of how learning took place and what their role in that learning was affected how materials were used in the home. Frequency and duration of the use of the storybooks in the home was not related to literacy achievement in kindergarten, but the use of the worksheet packets was strongly and positively associated with kindergarten literacy. The researchers conclude that the family literacy context is a powerful determinant of how any school-provided materials will be used.

EVANS, CAROL A. (1994). English-only children form bilingual homes: Considering the home-school connection. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 172–179). Chicago, IL: National Reading Conference.

Describes the home language contexts of 18 Mexican American families where the Spanish-speaking parents transmitted English, but not Spanish, to their children. Parents were interviewed individually in their home and in their preferred language. The Language Assessment Scales were administered in Spanish to the third grade child in each family to define the child's Spanish-speaking ability. Parents were also asked to assess their own understanding, speaking, reading, and writing abilities in English and Spanish on a 5-point scale. Twenty-six of the parents were American born and educated in the United States. Parents reported near full conversational competence in Spanish and in English but indicated substantially less ability to read and write Spanish as compared to English. Within the immediate family, parents almost always spoke English to the target child and stated advantages for children who knew both Spanish and English. It was felt that parental language and cultural loyalties, though highly valued, may be sacrificed in the interest of the next generation's welfare, specifically regarding discrimination and economic stability.

IV–16 Reading interests

GUTHRIE, JOHN T.; SCHAFER, WILLIAM; WANG, YUH YIN; & AFFLERBACH, PETER. (1995). Relationships of instruction to amount of reading: An exploration of social, cognitive, and instructional connections. *Reading Research Quarterly, 30*, 8–25.

Reanalyzes data from the 1986 National Assessment of Educational Progress in Reading to determine the relation of social, cognitive, and instructional factors to amount of reading engaged in by students in three different age groups. Questionnaires probing social, cognitive, and instructional facets of the educational process, as well as amounts of reading performed, were administered to a large, nationally representative sample of 9, 13, and 17-year-olds (n = 926, 922, and 947, respectively). Factor analysis of the response data identified constructs that were specifically related to certain age groups: 5 for 9-year-olds, 8 for 13-year-olds, and 9 for 17-year-olds. Subsequent path analysis revealed the relation of various age-identified constructs to amount of reading activity performed by each group. For all three age groups, path models revealed that amount of reading was significantly related to level of social interaction surrounding reading, cognitive strategies used during reading, and teacher-directed instruction.

PALMER, BARBARA MARTIN; CODLING, ROSE MARIE; & GAMBRELL, LINDA B. (1994). In their own words: What elementary students have to say about motivation to read. *The Reading Teacher, 48*, 176–178.

Questions how children develop the motivation to become engaged readers. Participants in the study were 330 third and fifth grade pupils from 16 classrooms in 2 school

districts. Questionnaires were administered to all the children to determine 3 facets of motivation to read: self-concept as a reader, value of reading, and reasons for reading. Conversational interviews were conducted with 48 selected children to obtain further insights on the facets of motivation being examined. Data analysis revealed 4 major influences on children's motivation to read regardless of reading proficiency or perceived engagement with school tasks. These were prior experience with books, access to books, social interactions about books, and self-choice of books.

MAYERS, PAMELA. (1994). Experiencing a novel: The thoughts, feelings, and motivation of adolescent readers. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice*, (pp. 325–334). Chicago, IL: National Reading Conference.

Seeks to identify when the literacy experience felt by adolescent readers is intrinsically motivating. Subjects were 24 eighth grade pupils (12 boys, 12 girls), who scored on grade level or higher on the GMRT. Pupils were required to interrupt briefly their reading every 20 to 30 pages in a novel for a total of 13 stop points. At these points, pupils recorded their thoughts, feelings, and level of motivation on log entries prompted by open-ended questions. Quantitative group data included all responses on the log entries across the 13 points in the novel. Six variables were explored: motivation, activation, affect, connectedness, and relatedness to character and situation. It was found that the children were intrinsically motivated to read the novel. There was greater variability during the first half of the book in motivation, mood, states, and connectedness to story. The majority of pupils reported feeling a stronger sense of relatedness to characters and situations more often at points during the first half of the novel. However, pupils' motivation, feelings, physical states, and sense of emotional connectedness were considerably higher during the latter half of the book. When pupils reported feeling a strong connectedness between their feelings and the story, their motivation to read was also higher. A negative relation was found between motivation and affect. The higher the motivation, the sadder, angrier, and more irritable were their moods. Three case studies are presented to corroborate group data.

WRAY, DAVID, & LEWIS, MAUREEN. (1993). The reading experiences and interests of junior school children. *Children's Literature in Education*, *24*(4), 251–263.

Surveys children's reading interests and experiences as well as teachers' views and practices with regard to language and literacy construction. Questioned on their reading experiences and current leisure reading were 450 junior children ages 9 to 11. Questioned on instructional techniques and the frequency with which they used them were 120 teachers of junior children. The 20 teachers directly involved with the junior children in this study were extensively interviewed with regard to the teaching activities they implemented. Findings showed sustained silent reading (SSR) to be a highly favored practice because it satisfied most teachers' goal of picquing children's reading interests and enjoyment. Children noted that time relegated to SSR enabled them to get acquainted with various genres of literature, although fiction seemed to be the most preferred genre of children in the sample. Individual teacher preferences also seemed to influence children's reading selections.

CONE, JOAN KERNAN. (1994, Winter). Appearing acts: Creating readers in a high school English class. *Harvard Educational Review*, *64*, 450–473.

Shares observations from the author's own classroom collected over a year's time about how students perceive themselves as readers, what books they read, how they respond to those books, and what factors in the past influenced their beliefs and feelings about themselves and their reading. The importance of choice, reflections, consensus, meaning making, and community for developing readers is demonstrated through vignettes taken from journals,

tapes, and class discussions. Based on her observations, the author reached the following conclusions: (1) high schools can create readers, (2) high school literature programs need to include independent reading as an integral part of the curriculum, (3) high school literature programs need to provide an opportunity for self-selection, and (4) literature teachers need to make talk an essential part of reading.

HARTLAND, SUE, & HARCOURT, KEITH. (1995, April). Discovering readers. *Reading, 29,* 38–46.

Investigates 1,712 English children's reading habits and their needs for and uses of newspapers. Data were collected from students representing 3 age groups: 8 to 9 years, 12 to 13 years, and 16 to 17 years. Students either responded to a 39-item questionnaire or were selected for an interview to determine the newspapers read at home, their responses to newspaper supplements written especially for children, and their preferences for article type. The investigation also examined children's sedentary pursuits. Over 95% of the respondents watched television every day. Most reported watching videos at least 2 or 3 times a week with no significant differences in viewing habits between boys and girls. A generally positive attitude toward reading was indicated by the sample, with approximately 58% indicating they agreed or strongly agreed with the statement "Reading is fun." Young children reported difficulties reading newspapers, but these difficulties appeared to diminish as children became older. In general, the younger age groups disliked long stories and poorly defined articles. Only a few students bought newspapers on their own. There was some evidence that older respondents found local newspapers easier to read than national newspapers. The respondents valued supplements that were written by and for young people. Forty-six percent of the 8- to 9-year-olds had already made a newspaper in class, and over half of the older students had done so. A large number of the sample, increasing with age, used a newspaper to help with their school work.

RINEHART, STEVEN D.; GERLACH, JEANNE M.; & WISELL, DIANA L. (1994). Choosing a book: Are BOB summaries helpful? *Reading Psychology, 15,* 139–153.

Reviews back-of-the-book (BOB) summaries to determine the extent to which they are useful in helping adolescents select books for recreational reading. Reviewed were the BOB summaries from 37 recently published novels for adolescents. The initial review of each BOB summary was provided by a different undergraduate teacher education student satisfying a requirement for a course in adolescent literature. The student reviewers (1) read a specified BOB summary, (2) wrote a prediction of what might happen in the book, based on the BOB summary, (3) read the book, and (4) provided a written analysis pertaining to the usefulness of the BOB summary for choosing the book. Categorization and tabulation of student responses pertaining to organizational aspects of the summary, specific elements of story grammar alluded to in the summary, accuracy of relation of the summary to the story, and perceived usefulness of the summary revealed BOB summaries generally provide accurate information on plot and are generally helpful in making book choices.

CHERIAN, VARGHESE I., & THOMAS, VARGHESE. (1995, April). Reading habits and academic achievement of Basotho children. *Perceptual and Motor Skills, 80,* 497–498.

Investigates the relation between the reading habits and academic achievement of black children in the Kingdom of Lesotho, Africa. Subjects included 509 Form III rural and urban southern-sotho-speaking Basotho children in the junior secondary school, ages 12 to 22. A questionnaire was administered requesting frequency of reading newspapers, magazines, and textbooks weekly during the 3 years of the junior secondary schooling. Grades in 18 subject matter areas were collected. Results revealed that more than 50% of children reported that they never read newspapers, magazines, and textbooks or did sometimes. Reading

habits correlated from .13 to –.21 with academic achievement in individual subject matter areas. A coefficient of .30 was found between reading habits and aggregated academic achievement in the best 6 subjects (English, Sesotho, mathematics, integrated science, and 2 optional subjects from the list of 18).

WEISS, KENNETH; STRICKLAND, DOROTHY; WALMSLEY, SEAN; & BRONK, GENEVIEVE. (1995, Spring). Reader response: It's okay to talk in the classroom! *Language and Literacy Spectrum, 4*, 65–70.

Reports what 12 children from grades 1, 3, and 5 had to say about books they were reading during 6 informal conversations with adult reading professionals. The children were from three schools, representing urban, rural, and suburban communities. Each book conversation lasted approximately 45 minutes, and children were encouraged to bring their books to the sessions. Each interview began with the open-ended prompt "Tell me about the book you've been reading." Overall, the children had much to say about books. Many conversations revealed a rich literary background; even less able readers, as judged by standardized test scores, had knowledge of styles, illustrations, and were able to link reading with their lives. Regardless of curricula, community, or reading ability, children were capable of carrying on rich literary conversations with adults. Many made informative and interpretive statements about the content of the books they were reading. Overall, some were able to discuss the content at a descriptive or identifying level, and others were able to evaluate, elaborate, interpret, and abstract information.

TALTY, FRAN. (1995, February). Small talk around big books: Interaction or conversationalisation? *Australian Journal of Language and Literacy, 18*, 5–18.

Investigates teachers' interactive styles in teacher-pupil discourse during shared-book experiences. Two year 2 teachers in two different schools were observed and taperecorded as they each conversed with their pupils ($n = 22$ and $n = 23$) about big books used during 6 shared-book experiences. Recorded conversations were transcribed and discourse was examined to determine the differential nature of question and answer sequences in informal settings. Content analysis of question classifications showed that although teacher talk dominated all lessons in both classrooms and similar proportions of questions were asked by both teachers, different patterns of teacher-pupil interaction, conversationalization, and genuine conversation were apparent. Pattern similarities and differences are used to illustrate the impact of discourse on social practices and language behavior.

COOPER, JILL. (1995, April). Children reading non-fiction for pleasure. *Reading, 29*, 15–21.

Explores how children approach the reading of nonfiction for recreational purposes as a way of understanding if this form of reading benefits functional or fiction reading. Twelve 8-year-olds were asked to choose 1 book they thought they would enjoy from a display of about 40 nonfiction books, representing a range of formats, styles, levels of difficulty, and subjects. The teacher observed how they chose the book and began to read, including their use of indexes and contents pages. Next, children were asked to find out something they did not know and relate it to the teacher and then to find something specific from their book. In a preliminary discussion, only 3 children said they chose to read nonfiction exclusively; all were boys. Book-choosing behaviors included skimming the covers and then looking closely at only 2 or 3 books before making a final choice. One child used a contents page; another used an index. No child had difficulty relating something from the book. Nor did any have problems using contents pages and indexes when asked to locate a specific piece of information. Children indicated they made their selections by book subjects and appearance. The majority of the books (93%) were read by flicking through, looking at pictures, or starting in the middle. Although at-

tracted by illustrations, the children preferred no one style. The author concluded that nonfiction reading employs critical evaluation that happens less frequently in reading fiction.

IV–17 Attitudes and affect toward reading

McKenna, Michael C.; Stratton, Beverly D.; Grindler, Martha C.; & Jenkins, Stephen J. (1995, March). Differential effects of whole language and traditional instruction on reading attitudes. *Journal of Reading Behavior, 27*, 19–44.

Reports a 3-part study comparing the effects of whole language versus traditional basal instruction on children's attitudes toward reading. In Experiment 1, subjects were children in 2 whole language elementary schools ($n = 485$) and 2 traditional schools ($n = 433$) in grades 1–5. The 2 subscales of the elementary reading attitude survey were used to assess attitude toward recreational and academic reading. Each subscale consists of 10 items scored on a 4-point basis. No significant main effect of instructional program was found for either recreational or academic attitude. For Experiment 2, the same traditional schools were used but a new whole language school was identified ($n = 713$); scores on the recreational reading attitude only were compared. Again, no significant differences in attitude were noted. In Experiment 3, follow-up structured observations were conducted in 2 first grade classrooms in the whole language school of Experiment 2. The 2 classrooms were selected because recreational attitude means of the classes differed significantly. Two mornings were spent in each classroom and notes were recorded for each of 2 dimensions of instruction: physical environment and skill development. Additionally, informal interviews were conducted with teachers who also were asked to complete the Teacher Orientation Toward Reading Practice (TORP) survey. The TORP produces scores reflecting orientation toward phonics instruction, skills instruction, and whole language. Both teachers had an eclectic approach to instruction. Systematic phonics instruction, corrected spelling, and ability grouping did not appear to have negative effects on attitude. However, the manner in which the techniques were employed was deemed important and suggested that describing teachers' approaches with global category labels is not appropriate.

Elley, Warwick B. (1995). Lifting literacy levels through books. *Reading Forum NZ, 1*, 3–14.

Reviews briefly the Book Flood study and describes some research the author and others have done that supports and extends the study. Noted are figures indicating that the literacy gap between developed and developing countries is increasing. Views of best reading children in 10 high-achieving and 10 low-achieving countries on how to become a good reader are presented. Best readers in the high-achieving countries checked that having good books around, having a lively imagination, and learning many new word meanings were important elements in becoming a good reader. Best readers in low-achieving countries checked that being able to sound out words, doing lots of drill at the difficult things, and doing lots of reading for homework were most important in becoming a good reader.

Dana, Marion E. (1992, Fall/Winter). Promoting reading attitudes and reading achievement: A review of the literature. *The Mississippi Reading Journal, 4*, 4–7.

Searches the literature on classroom practices for increasing positive attitude toward reading and on the research related to links between attitude toward reading and reading achievement. Thirteen references are cited. Although studies reported a positive correlation between reading attitude and reading achievement, the common variance between the two tended to be only 10% or less.

MIALL, DAVID S., & KUIKEN, DON. (1995, February). Aspects of literary response: A new questionnaire. *Research in the Teaching of English, 29*, 37–58.

Describes the development of an instrument that provides scales measuring 7 different aspects of readers' orientation toward literary texts, reviews evidence for its reliability and validity, and suggests possible teaching and research uses for it. The literary response questionnaire consists of 68 items, rated on a 5-point scale relative to the extent the statement is true of the subject. It was administered to 793 University of Alberta, Canada, students with the results subjected to factor analysis. Seven factors were identified: insight, empathy, imagery, vividness, leisure escape, concern with author, story-driven reading, and rejecting literary values. A series of 5 studies was undertaken to establish validity. Each of the 7 scales is reported to have good internal consistency, retest reliability, and factorial validity.

VAN DER BOLT, LILIAN, & TELLEGEN, SASKIA. (1994–95). The connection between the reading of books and the development of sympathy and empathy. *Imagination, Cognition and Personality, 14*(3), 247–260.

Asks if book reading enhances emotional development and the ability to empathize and sympathize. Subjects were 198 students between the ages of 9 and 15. Determined reading frequency for half of the students was high and for the other half was low. Each student responded to a questionnaire probing the extent of his or her emotional experiences (fear, anger, grief, surprise) as well as his or her reactions to such experiences (shivering, heart palpitations, lump in throat). Percentage comparisons on various probes revealed that students with high-reading frequencies generally reported more empathetic and sympathetic involvements than students with low-reading frequencies.

IV–18 Personality, self-concept, and reading

MAUGHAN, BARBARA. (1995, March). Annotation: Long-term outcomes of developmental reading problems. *Journal of Child Psychology and Psychiatry, 36*, 357–371.

Reviews studies exploring the long-term effects of reading difficulties first experienced in childhood. Most of the studies indicate that reading difficulty experienced in childhood persists into adolescence and adulthood. The negative consequences of continued reading difficulty on various facets of everyday life, including educational attainment and occupational outcomes, are documented. Studies of self-perception and attribution reinforce the view that adults who have experienced long-term reading difficulties have low opinions of themselves as well as strong tendencies to blame themselves for their literacy problems. Research showing the relation between continued reading difficulty and problems with psychosocial adjustment is also presented.

CHAPMAN, JAMES W., & TUNMER, WILLIAM E. (1995). Development of young children's reading self-concepts: An examination of emerging subcomponents and their relationship with reading achievement. *Journal of Educational Psychology, 87*, 154–167.

Examines in 4 experiments the development of children's self-concepts as readers. In Experiment 1, 520 children (ages 5 to 7) from 4 primary schools in a New Zealand city were individually administered a 50-item questionnaire tapping their self-concepts as readers. Results of a 3 (age) × 2 (item type) ANOVA revealed a response phenomenon in which responses to negative items were inconsistent with responses to positive items. In Experiment 2, the self-concept questionnaire used in Experiment 1 was revised with regard to wording and syntax to conform with accepted developmental psycholinguistic factors as they pertain to primary grade children. Subjects for this experiment were 267 children enrolled in 2 primary

schools in a New Zealand city. ANOVA and correlational procedures applied to the data revealed more consistency between children's positive and negative responses than had been displayed in Experiment 1. Experiment 3 further delineated factors inherent in reading self-concept. Four-hundred forty-four children, ages 4 to 7, enrolled in 4 primary schools in a New Zealand city were administered the reading self-concept scale (RSCS) developed from the questionnaire used in the previous experiment. Factor analysis procedures applied to the data suggested reading self-concept to be comprised of 3 subcomponents; perceptions of reading competence, perceptions of difficulty with reading, and attitudes toward reading. Experiment 4 explored the relation among the 3 subcomponents, increasing age, and reading development. Seven-hundred seventy-one children, ages 5 to 10, were administered the RSCS along with a variety of reading achievement measures. Correlational analyses showed children's perceptions of reading competence and difficulty to remain constant over the age span. However, positive attitudes toward reading exhibited during the first 3 years of school became less optimistic during their fourth and fifth grade experiences.

GUICE, SHERRY, & JOHNSTON, PETER H. (1994). Assessment, self-assessment, and children's literate constructs. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 72–81). Chicago, IL: National Reading Conference.

Reports on a longitudinal investigation of the nature of literature-based instruction in four schools that serve large numbers of economically disadvantaged children. The primary data for this study come from interviews with 49 children in 8 teacher-collaborator classrooms in grades 1–4. The interviews were conducted by the research team near the end of the second year of a 5-year study. Children were asked to describe how they go about reading and writing. Constant comparison methods were employed for analyses. In none of these classrooms was it common for pupils to engage in discussion of the processes of reading and writing, nor was it common for them to be encouraged to self-assess. Although most children could talk some about their literate lives, few of them had a rich descriptive language with which to do so. Children's notions of themselves as readers and writers and what would help them become better readers and writers were generally congruent. The range of differences in children's understanding of reading and writing varied greatly even within the same classroom.

CHAN, LORNA K. (1994, Summer). Relationship of motivation, strategic learning, and reading achievement in grades 5, 7, and 9. *Journal of Experimental Education, 62*, 319–339.

Investigates relations among various contributors to motivation, reported use of reading strategies, and reading achievement. Subjects were 104 fifth, 133 seventh, and 101 ninth graders with and without LDS from 2 primary and 2 high schools in New South Wales, Australia. Four measures of motivation and metacognitive processing designed by the author were administered. These assessed (1) students' attribution for school success or failure; (2) students' self-perceptions of cognitive, social, physical, and general competence; (3) students' knowledge and usage of specific reading strategies; and (4) students' awareness and regulation of general learning strategies. An untimed level-appropriate test of reading comprehension was also administered to each group. MANOVA and ANOVA procedures applied to the data produced empirical support for theories that propose close relations between motivation and strategic learning. Motivation accounted for more achievement variance than strategic learning for the younger pupils in this study. However, for ninth graders, strategic learning mediated between the effects of motivation on reading achievement. Poor learners in this study displayed patterns of learned helplessness.

IV–19 Readability and legibility

CARVER, RONALD P. (1994, December). Percentage of unknown vocabulary words in text as a function of the relative difficulty of the text: Implications for instruction. *Journal of Reading Behavior, 26*, 413–437.

Examines, in two studies, the relations between unknown vocabulary and text difficulty. In Study 1, subjects were 219 third, fourth, fifth, and sixth graders from a metropolitan elementary school. Subjects were requested to underline unfamiliar words as they read selected passages taken from subject area texts and trade books. In Study 2, 60 graduate students completed a similar task as they read selected narrative and expository passages at junior high, college, and graduate levels. Relative difficulty was determined by computing the difference between each student's reading ability in grade equivalent units and the readability of the passages each student had read in grade equivalent units. Further analyses of the passages used in both studies then showed (1) relatively easy material contains close to 0% unknown basic words, (2) relatively hard material includes approximately 2% or more unknown basic words, and (3) material closely in line with reader ability contains approximately 1% unknown basic words. Findings bring into question practices that emphasize significant amounts of free reading for purposes of increasing vocabulary and reading level.

RAMSEY, RICHARD N.; O'HEAR, MICHAEL F.; & BADEN, WILLIAM W. (1993–94). Student perception of readability and human interest in upper-level composition textbooks. *Forum for Reading, 24*, 1–10.

Examines student perceptions of text features that affect readability and interest in upper-level composition texts used in an interdisciplinary college writing class. Subjects were 202 students, mostly sophomores and juniors, enrolled in 7 sections of a course. Two chapters were selected from each of 2 textbooks. After reading, students completed a Likert-scale questionnaire over prepared statements on readability and interest. Flesch and Fry readability formulas were applied to the texts, and formula results were compared to student perceptions. Flesch human interest formula ratings were calculated for each book and compared to the student perceptions of text interest. Students' results and formula results did not agree. Students felt the books were less interesting and easier to read than formula ratings suggested.

CARDINAL, BRADLEY J., & SEIDLER, TODD L. (1995, April). Readability and comprehensibility of the "Exercise Lite" brochure. *Perceptual and Motor Skills, 80*, 399–402.

Reports two studies describing the readability and comprehensibility of the "Exercise Lite" brochure developed by the U.S. Centers for Disease Control and the American College of Sport Medicine. Study 1 measured the readability of the brochure using multiple readability formulas and measurement approaches. Using the Flesch, Fry, and McLaughlin formulas, the researchers determined that the brochure was difficult reading, probably requiring a minimum of graduate level education to read and comprehend. A second study focused on readers' comprehension of the brochure. Fifty-six adults of varying levels of education read a version of the brochure, which was prepared in a cloze format, with every 5th word deleted. Average comprehension score was 54%. Using the criterion of 40% to 59.9% as needing supplemental instruction and scores below 40% as incapable of understanding, only 30% of the subjects were capable of understanding the brochure, 54% needed supplemental instruction, and 16% found the brochure incomprehensible.

IV–20 Literacy acquisition

ELSTER, CHARLES. (1994). Patterns within preschoolers' emergent readings. *Reading Research Quarterly, 29*, 402–418.

Describes a variety of reading and talk strategies observed within the emergent readings of preschoolers. The study involved 36 children, ages 4 to 5, in 3 Head Start classrooms in a midwestern U.S. city. Audiotapes of their emergent readings were obtained during two 6- to 8-week intervals in both the fall and spring. Tapes were transcribed and annotated from field notes indicating the diversity of behaviors attending the children's emergent readings as well as the various text and picture characteristics of the books being read. Transcripts of the readings were divided into speech units, which were then categorized according to a variety of talk or reading strategy dimensions. Findings of the analysis revealed the emergent readings to be sequences of reading and talk episodes rather than "seamless wholes." Emergent readings of nonnarrative material were less strategy dominated than reading of narrative material. Observed emergent reading strategies appeared to be influenced mainly by three sources of information: the book, the child's memories or prior knowledge, and the social setting where the reading was taking place.

NEUMAN, SUSAN B., & GALLAGHER, PHYLLIS. (1994). Joining together in literacy learning: Teenage mothers and children. *Reading Research Quarterly, 29*, 382–401.

Investigates whether children's literacy play and intellectual development are enhanced when their adolescent mothers are systematically shown how to employ various child-centered literacy interaction strategies. Participants in the study were 6 mothers and their children, ages 3 and 4. The 6 children were given the PPVT prior to the study's intervention phase. A play area, which included a variety of literacy-related materials, was created in the home of each mother-child dyad. In 3 sessions, mothers were individually coached on how to execute the following literacy extending behaviors with their children: (1) labeling objects of interest to the child, (2) scaffolding learning situations so that the child's current knowledge level could be extended, and (3) responding to utterances contingently in order to expand and challenge the child's interpretations. A 6-week intervention phase followed during which each mother and child's interactions were audiotaped on several occasions. To measure for transfer, a new set of materials was introduced into each home-play area with a maintenance period and no additional coaching being implemented. Ten sessions of audiotaping of each mother and child's interactions followed. Audiotapes were analyzed for target behavioral occurrences and a multiple-baseline different behavior design was employed to measure for growth and change over time. Children were administered an alternate form of the PPVT at the completion of the last session. Findings revealed increases in the mothers' usage of various interactional behaviors after intervention. Children's posttest gains on the PPVT also increased significantly, as did their active involvement in literacy-related activities.

GREGORY, EVE. (1993, June). What counts as reading in the early years' classroom? *British Journal of Educational Psychology, 63*, 214–230.

Explores how children learn to participate in reading lessons conducted during their first 18 months of reading instruction. Observed, along with their teacher, were 9 children from different sociocultural backgrounds in one urban multilingual classroom. Data included audiotapes of reading lessons conducted with the children in groups or alone and interviews conducted with the teacher and parents over the span of the study. Ethnographic methodologies were used to document how and why specific teacher-pupil interactions during reading instruction were negotiated as they were. A multilayering methodology enabled examination of lesson discourses in conjunction with knowledge of each child's social, cultural, and linguistic background. Observed patterns in the data showed the teacher's interpretation of

reading and her implicit expectations from the children were not always reflected in her modeling. As a result, children with different home-received orientations to reading accommodated differently to what they learned about what reading involved. Children who had been read to at home displayed behaviors reflective of the teacher's interpretations, whereas children who had not been read to reflected the teacher's actual modeling behavior.

BOX, JEAN ANN, & ALDRIDGE, JERRY. (1993, December). Shared reading experiences and Head Start children's concepts about print and story structure. *Perceptual and Motor Skills*, *77*, 929–930.

Reports data from an 8-week study to determine if there were differences in 4-year-old Head Start children's concepts about print and story structure after participation in shared reading experiences using predictable books. Children were randomly assigned to 3 groups: a treatment group using shared reading experiences, a control group using centers and instructional units, and a placebo group receiving movement activities. Concepts About Print and the Early School Inventory-Preliteracy tests were administered as pre- and postmeasures. Adjusted means were significantly different on the Concepts About Print test after treatment, but no significant differences were found for measurements of story structure derived from Early School Inventory-Preliteracy scores. The researchers conclude that shared reading experiences can make a difference in children's processes in a relatively short period of time.

CHANDLER, DAISY, & ALDRIDGE, JERRY. (1992, December) Responses of first-grade children to concepts about printed material before and after shared reading experiences. *Perceptual and Motor Skills*, *75*, 840–842.

Studies beginning readers' concepts about print after taking part in shared reading experiences using predictable books. Subjects were 24 African American first graders from a large inner-city school. Children were assigned randomly to a group that received traditional basal reading instruction or a group that received shared book experiences in addition to traditional instruction. Children in both groups were given the Concepts About Print test prior to and following the experiment. ANCOVA using the pretest scores as the covariate showed no significant difference between the two groups in their concepts about printed material.

WALLIS, KATHLEEN M. (1995). The importance of phonemic awareness for emergent readers. *Literacy: Issues and Practices*, *12*, 18–26.

Reviews research to demonstrate the crucial role of phonemic awareness in emergent reading. Suggests the importance of knowing learners and building on their literacy base, since phonemic awareness instruction is not needed if children are already reading. Also included are suggestions for assessing phonemic awareness and oral and written activities that will develop phonemic understanding in children.

ANDERSON, JIM. (1994, July/September). Parents' perceptions of emergent literacy: An exploratory study. *Reading Psychology*, *15*, 165–187.

Explores parents' perceptions of young children's literacy acquisition and determines how consistent their beliefs are with an emergent literacy perspective. Participants were 25 middle- and upper middle-class parents of 3- and 4-year-old children attending the University of British Columbia Child Study Center. Researchers questioned and audiotaped the parents using *Parents' Beliefs About Literacy Learning: A Structured Interview Guide*. Findings suggested that middle- and upper middle-class parents are supportive of an emergent literacy perspective. However, they are not completely opposed to occasional use of skill-based instructional materials and methodology. In fact, some concepts associated with an emergent literacy model such as invented spelling are not embraced without concern.

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ROWE, DEBORAH WELLS. (1994). Learning about literacy and the world: Two-year-olds' and teachers' enactment of a thematic inquiry curriculum. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 217–229). Chicago, IL: National Reading Conference.

Focuses on the ways teachers and children in a preschool classroom enacted informal book reading and other informal book-related activities (e.g., dramatic play). Data are derived from a 9-month ethnographic study in which a university- and school-based research team collaborated to plan and implement literacy experiences for 2-year-olds. Children attended the preschool 1 or 2 days per week with enrollment ranging from 12 to 15 children each day. The lead teacher assumed a researcher role 2 days a week, focusing on collecting data in the classroom library center (field notes, observations, informal interviews, and videotapes). Changes in the curriculum in response to teachers' observations involved existing ways of selecting books, displaying materials, structuring time, and organizing space. Children in the classroom naturally selected their own personal themes for reading at the book center, and these themes were not the same as those selected by the teachers as the focus for the week's unit. The children appeared to use sophisticated learning strategies and an attitude of inquiry. Children engaged in lengthy personal inquiries and viewed book reading as connected to play in a variety of unanticipated ways. The unenvisioned curriculum and role of unexamined participation patterns in the enacted curriculum are discussed.

COX, BEVERLY E. GRIFFIN, & DIXEY, BRENDA P. (1994). Preschoolers doing "code-switching." In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 162–171). Chicago, IL: National Reading Conference.

Seeks to answer whether preschool children adapt oral monologues to meet the needs and expectations of future readers, hence recognizing and adapting the language for a new audience. Stratified random sampling, on the basis of 3 emergent reading categories, was used to select the study's 30 participants from a larger study of 48 4- and 5-year-old children. Children attended 1 of 2 preschool sites: a university preschool and a county-operated site. Children were seen individually by a familiar adult and asked to construct 2 monologues, each containing 2 or more sentences about a topic produced without dialogue support. The adult first talked with the young child and encouraged the child to tell an oral monologue based on personal experience. The child was then asked to dictate the monologue as a story written for others. The task required the child independently to recognize the change in context and make audience appropriate adaptations. For both oral and written-for-others contexts, linguistic analyses were conducted to examine obligatory and optional genre elements. Chi-square was used to examine categorical frequency data. Some preschool children used significantly more complete orientations in their written-for-others monologues than did the 2 less advanced groups. No differences were found among the children in the use of obligatory elements such as a basic beginning, middle, and end. Qualitative differences were found between all 3 emergent reading groups. Examples of each are presented and discussed related to code-switching that characterized each group's oral and written attempts.

KERTOY, MARILYN K. (1994, Fall/Winter). Adult interactive strategies and the spontaneous comments of preschoolers during joint storybook readings. *Journal of Research in Childhood Education*, 9, 58–67.

Explores the impact of specific commenting or questioning strategies used by adults on the complexity and types of spontaneous comments to story details made by children during story readings. Subjects were 24 children, ages 3.5 to 6.5, attending a Montessori preschool. The subjects were assigned randomly to listen individually to stories read by an adult under 3 different

conditions: commenting, questioning, or general reading. Transcripts from audiotapes of interactions between children and adults during the readings were analyzed to identify children's utterances that were spontaneous or specific responses to target questions or comments posed by the adult. Utterances of both types were further analyzed with regard to several other aspects of inherent complexity, including the number of communication units an utterance contained and whether a unit focused on story structure, meaning, or print. Repeated measures ANOVA showed that children in the comment group produced spontaneous utterances of greater complexity than children in the question group. The type of interactive strategy implemented by the adult readers also significantly affected the type of comments children made about the stories they had heard.

OLSON, MARY W.; LOGAN, JOHN W.; & LINDSEY, TAMARA P. (1989, Spring). Early and current reading and spelling practices of gifted spellers. *Reading Psychology, 10*, 189–201.

Investigates the early literacy experiences and current spelling practices of students considered to be gifted spellers. Open-ended questionnaires were mailed to the 185 finalists of the 1987 Scripps-Howard National Spelling Bee, who ranged from 9- to 15-years of age and to their parents. Student questionnaires consisted of 9 items pertaining to study habits, spelling strategies, reading habits, and metacognition about spelling mastery. In addition to providing demographic information, parents responded to 6 items pertaining to their child's early literacy activities, involvement with gifted and talented programs, and their advice for other parents who want to help their children become better spellers. Of the 83 student-parent pairs who returned the questionnaire, 30 students were randomly selected to be interviewed by telephone. Results indicated that students were interested in literacy activities at an early age, most reading before they entered school. Students considered themselves to be voracious readers, and the data suggest they passed through developmental spelling stages earlier than average and used visual memory strategies, word meanings, and saying/writing words to master their spellings.

PETER, JEANNE. (1994). Examining the participation of young, linguistically diverse children at a writing center. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 180–189). Chicago, IL: National Reading Conference.

Seeks to identify what strategies linguistically different children use to participate in a writing center and how they involve others in their activities. Subjects were three 5-year-old linguistically different children in a mainstream classroom located in a university child care center. Children were selected on the basis of their gender, their varied nationalities, and their consistency in attendance. The primary teacher assumed the researcher role as participant-observer during the year and focused observations and field notes on interactions at the classroom writing center. Data were analyzed using the constant comparative method and member checking with the other classroom teacher. Children spent much of their day involved in self-initiated, self-directed activities. The primary pattern observed at the writing center was the children's use of access strategies that mediated their lack of facility with written and spoken English. While other children would begin their visit to the center by writing a note to someone or by making a book, those children with limited English abilities adopted other modes of communication not dependent on English, such as drama, drawing, music, or even a game to begin an activity at the center.

OSAKA, MARIKO; OSAKA, NAOYUKI; & GRONER, RUDOLF. (1993, March). Language-oriented working memory: Evidence from German and French reading span tests. *Bulletin of the Psychonomic Society, 31*, 117–118.

Uses reading span measures written in German and French to assess working memory efficiency. Subjects were 15 Swiss staff and student members from the University of Bern who were bilingual in German and French. The ages of the subjects ranged between 23 and 50. Subjects were given 70 sentences in German and 70 sentences in French in sets of 2, 3, 4, and 5 sentences. After reading all the sentences within a set, subjects were asked to recall the last word of each sentence in the set. Correlations between scores attained on the German and French version were highly significant, supporting the notion that word memory for reading is independent of language. Scores of older subjects were generally lower than those of younger subjects.

DEMANRIQUE, ANA M. BORZONE, & SIGNORINI, ANGELA. (1994, November). Phonological awareness, spelling and reading abilities in Spanish-speaking children. *British Journal of Educational Psychology, 64*, 429–439.

Studies the relation among phonological awareness, spelling, and reading ability with first grade Spanish-speaking children. Included were children from a middle-class school in Buenos Aires, 19 of whom were designated as skilled readers and 20 as less skilled readers based on reading scores. All are reported as having at least normal IQs on the WISC. A phoneme counting test was given to assess ability to count the number of phonemes in a word, with successful performance on 6 consecutive trials as the criterion. In addition, a 20-item spelling test and a word reading task based on the spelling test were administered. All tasks were individually administered. No significant difference was found between the two groups on the phonemic segmentation task, with most of the less skilled readers reaching criterion. The skilled reading group performed almost at ceiling on all 3 measures. Skilled readers performed better than less skilled readers on both spelling and reading. For the less skilled readers, a coefficient correlation of .57 was obtained between phonemic segmentation and spelling with a coefficient of .14 between phonemic segmentation and word reading. The authors surmise that various characteristics of Spanish phonetic structure may account for the early development of phonemic segmentation skills and allow mastery of sound-letter correspondence rules as reflected in spelling performance.

RANKIN, JOAN L.; HARWOOD, KERRI; & MIRENDA, PAT. (1994, December). Influence of graphic symbol use on reading comprehension. *Augmentative and Alternative Communication, 10*, 269–281.

Reviews the literature focusing on the potential impact of graphic symbol use on the reading comprehension ability of beginning readers using augmentative and alternative communication (AAC) systems. The article begins with a section defining reading comprehension and considers its relation to AAC users. Research identifying the language abilities critical for reading comprehension is then presented. Included in this section is a discussion of the metalinguistic skills related to reading comprehension. A final section examines the potential role of graphic symbol use in facilitating the development of these metalinguistic skills. It is noted that the research investigating the literacy development of children using AAC systems is limited in quantity, with no research that directly assesses the potential impact of various graphic symbols on the process. However, it is felt that the use of symbols to portray meaningful messages may facilitate the development of word awareness. Additionally, syntactic awareness may develop as a result of children obtaining practice in creating whole units of meaning by integrating sets of individual symbols.

IV–21 Studies on the reading process

ELSTER, CHARLES. (1995, March). Importations in preschoolers' emergent readings. *Journal of Reading Behavior, 27*, 65–84.

Undertakes a study to examine the sources and frequency of nontext material that young children import into their emergent readings, the influence of particular texts and prior information on frequency and type of importations, and the relation between importations and indicators of emergent reading development. Thirty-three children in 3 Head Start classrooms were involved in the study. Three books were read to children 3 times each over the course of 1 to 3 weeks. Children then read each book individually to a researcher. Both group read-aloud and individual reading sessions were taperecorded and notes made of nonverbal behaviors. Emergent readings were divided into t-units and analyzed in two ways: (1) using a holistic emergent reading scale, and (2) figuring the percentage of story content reproduced. Sources of imported material were identified and counted. Four sources of nontext importations were found in the emergent readings: illustrations, prior read-aloud sessions, personal experience and background knowledge, and other texts. Importations from pictures and from background knowledge were most frequent; importations from other texts were the least frequent type. Children who produced narrative readings containing the greatest proportion of story content included importations most frequently in their readings.

BRENNA, BEVERLEY A. (1995, February). The metacognitive reading strategies of five early readers. *Journal of Research in Reading, 18*, 53–62.

Examines the metacognitive reading strategies of 5 children, 4 to 6 years of age, who were reading fluently prior to formal instruction in grade 1. Fluency was judged by whether the children could conduct meaningful reading with relative smoothness. Methods of this case study included semistructured interviews, observations, informal miscue analyses of the children's oral reading, and role play in which the children answered a puppet's questions about reading or attempted to teach the puppet to read. The children's personal characteristics and home environments provided a context for their reading strategies, and particular attention was given to the caregiver-child interactions, which may have facilitated the development of metacognitive reading strategies. Findings suggested that each child used a variety of metacognitive reading strategies involving knowledge of self, task, and text. Each showed individual preferences for certain strategies, as indicated by the number of times these strategies were used. The more fluent readers employed more strategies. In addition, the readers applied a variety of repair strategies after realizing errors in word identification. Findings from this study also indicated a relation between the nature of caregiver-child assistance and the development of particular metacognitive reading strategies.

RUOFF, LAIMA, & HILLMAN, JUDITH. (1990, Winter). Investigating the comprehension of expository text structures in third, fourth, and fifth graders. *New England Reading Association Journal, 26*, 6–13.

Describes how children begin to read expository material. Subjects were 45 children found in intact third, fourth, and fifth grade classrooms. Each child was given 7 tasks in the form of an interview. One of the tasks required the subject to recognize an expository passage, one required the subject to discriminate a particular type of expository text structure among others, and one required the subject to predict what was missing from an incomplete structural form. The remaining 4 parts of the interview were questions about how the subjects read expository text. Results indicated that 100% of children at all grade levels were successful with the recognition task. Sixty percent of third graders, 82% of fourth graders, and 92% of fifth graders were successful with the discrimination task. Forty percent of third graders, 45% of fourth graders, and 42% of fifth graders were successful with the prediction task. Generally, increasing percentages of pupils at each grade level indicated that they used particular strategies to read expository text.

CRAIG, MADGE T., & YORE, LARRY D. (1995, April/June). Middle school students' metacognitive knowledge about science reading and science text: An interview study. *Reading Psychology, 16*, 169–213.

Reports data from structured interviews with 52 Canadian middle school pupils, grades 4 through 8, from 6 schools. Subjects represented a 10% stratified random subsample of 532 pupils who had completed a survey instrument in a larger, previous study. Interview protocol items were based on 21 strategic characteristics of successful readers of science text and covered 3 domains of metacognitive knowledge: declarative (knowing what), procedural (knowing how), and conditional (knowing when and why). Each interview took approximately 15 minutes. Responses were transcribed into gist accounts and scored as revealing comprehensive, surface, or incorrect or no knowledge. Quantitative analyses suggested that pupils had surface level metacognitive knowledge about 20 of the 21 strategies. Qualitative analysis indicated that their knowledge of science reading, science text, and science reading strategies was poor and was similar to the knowledge of younger children who were reading narrative text.

MITCHELL, DON C.; CORLY, MARTIN M.B.; & GARNHAM, ALAN. (1992, January). Effects of context in human sentence parsing: Evidence against a discourse-based proposal mechanism. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 18*, 69–88.

Evaluates two discourse information theories of parsing in sentence comprehension: one supporting the notion that only syntactic considerations are involved in parsing, and the other that semantic, pragmatic, and syntactic considerations are involved. Subjects for both experiments were 24 students at the University of Exeter, England. Sentence structures, each with an ambiguity that could be parsed in accordance with either the syntax alone theory or syntax and other facets of interactive theory, were shown individually on a computer monitor. Reaction times for various conditions were submitted to ANOVA procedures. Results supported the model holding that parsing is executed on purely syntactic considerations.

SINATRA, GALE M., & ROYER, JAMES M. (1993, September). Development of cognitive component processing skills that support skilled reading. *Journal of Educational Psychology, 85*, 509–519.

Examines longitudinally the growth changes in component processing skills related to reading. Experiment 1 involved 112 children enrolled in grades 2 through 5. A computerized battery of tasks measuring speed and accuracy of recognizing letter naming features, naming of words and pseudowords, concept activation, syntactic analysis, and semantic analysis was administered to the subjects. For Experiment 2 the same battery was readministered to 59 of the original subjects. Data from each experiment were analyzed using correlational, MANOVA, and regression techniques. Findings revealed several trends pertaining to the development and interaction of cognitive component processes over time.

ALBRECHT, JASON E.; O'BRIEN, EDWARD J.; MASON, ROBERT A.; & MYERS, JEROME L. (1995, March). The role of perspective in the accessibility of goals during reading. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 21*, 364–372.

Investigates in three experiments whether readers adopt the protagonist's perspective during reading of narrative texts. Each experiment included 40 undergraduates enrolled in introductory psychology courses as subjects. In each experiment the same 16 short paragraphs were used, each consisting of an opening, a goal statement, and a conclusion. The goal statement consisted of a goal that the protagonist was either attempting to achieve (unsatisfied goal) or had completed (satisfied goal). Two versions of the conclusion were presented: a

potential-inference sentence and a no-potential-inference sentence. Four sets of materials were constructed, each set containing 4 passages in each of 4 conditions; 16 filler passages were also presented. Following each passage, a single probe word task and a comprehension question were presented. Reading times for the last line of the passage and recognition times for the probe words were recorded. In Experiment 1, goal category words were recognized more quickly following potential-inference statements than following no-potential-inference statements, both when the protagonist's goal was unsatisfied and when it was satisfied. In Experiments 2 and 3, subjects were to view the text situation from the point of view of the protagonist. Recognition times were significantly faster when the goal had not been satisfied. Results are interpreted as demonstrating the influence of perspective during comprehension.

GUZZETTI, BARBARA J. (1990, Winter). Effects of textual and instructional manipulations on concept acquisition. *Reading Psychology, 11*, 49–62.

Examines the relative effects of text-based and reader-based manipulations on secondary students' concept acquisition and learning. Subjects were 104 students in 11th and 12th grade chemistry classes who were randomly assigned to 1 of 4 treatment groups. Group 1 read nonrefutational text (the course textbook) only. Group 2 read refutational text (text that cited and refuted common misconceptions about the topic for study) only. Group 3 read nonrefutational text following a prereading activation activity. Group 4 read a refutational text following the activation activity. The prereading activation activity consisted of a demonstration of the law discussed in the 4 texts, Boyle's Law, followed by a discussion of the demonstration. After reading, Groups 1 and 2 were to write a summary of the passage and to diagram the concepts. Groups 3 and 4 did nothing after reading. All students were given 3 pretests to assess their understanding of the concept of Boyle's Law and asked to rate their confidence on a Likert scale. An immediate posttest required students to apply Boyle's Law to two novel, real-life situations. The 3 pretests were given as delayed posttests 3 weeks after the treatment. Results of a one-way ANOVA showed no significant differences among groups on the pretest. ANCOVAs indicated no significant differences among any of the three pretests and their corresponding posttests, no significant main effects for text-type, no significant main effects for treatment, and no significant interaction effects.

JOU, JERWEN, & HARRIS, RICHARD JACKSON. (1991, November). Processing inflections: Dynamic processes in sentence comprehension. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 17*, 1082–1094.

Asks if reading can be both syntactically and semantically driven, the former reflecting bottom-up theory and the latter reflecting top-down theory. Involved in each of three experiments were psychology students assigned to experimental and control conditions. For each experiment, subjects read brief texts and then read and answered true-false questions that used incorrect verb inflections. The proportion of incorrect inflections varied for Experiments 1 and 2 as questions were randomly presented. For Experiment 3, questions with correct and incorrect inflections were each presented in blocks of question lists. For each experiment, response times (RT) and response accuracy were of interest. A noticeable RT effect was believed to signal bottom-up reading as subjects fixated on inflectional inconsistencies. Conversely, no RT effect was felt to signal top-down reading as meaning constraints guided sentence processing and inconsistencies would be ignored. ANOVA procedures were applied to the RT and accuracy measures of each experiment. Although inflectional errors did not affect response accuracy, findings of Experiment 1 and 2, wherein questions were not systematically presented, yielded slower RTs to error trials, indicating reader sensitivity to syntactic constraints. However, findings of Experiment 3 showed that automatic syntactic processing can be overridden as strategic processes for coping with errors are developed. Findings of the set of ex-

periments suggest that both bottom-up and top-down processes are dynamically applied to meet specific task demands.

SMAGORINSKY, PETER, & COPPOCK, JOHN. (1994). Exploring artistic response to literature. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 335–341). Chicago, IL: National Reading Conference.

Conducts a case study of a student who represented his response to a short story by drawing a picture. The student was a 16-year-old white male who had experienced frequent failure in school. The research took place in an alternative school/treatment facility for recovering substance abusers situated in a rural community. Prior to entry in the alternative school, he had failed all subjects except art, in which he received an A. As a young child the student had a hearing impairment and frequently communicated by drawing pictures. Through a stimulated recall interview (prompted through the use of a videotape), the student reflected on the processes engaged in as he read the story, chose his textual medium, ascribed meaning to the story, and produced his text. His thinking shaped the text he was producing and was shaped by the process of creating it. Descriptions of how the student's composition of an artistic text illustrated and influenced his understanding of the story are provided.

LOXTERMAN, JANE A.; BECK, ISABEL L.; & MCKEOWN, MARGARET G. (1994). The effects of thinking aloud during reading on students' comprehension of more or less coherent text. *Reading Research Quarterly, 29*, 352–367.

Reports two studies investigating the effects of text coherence and active engagement on pupils' comprehension of textbook information. Subjects, sixth graders, were assigned to 1 of 4 conditions. They read original or revised text with either silent reading or think-aloud procedures. Revised texts, although longer than original texts, presented more textual coherence than did the original texts. In Study 1, subjects first recalled what they read and then answered open-ended questions about the texts. Transcripts were scored for amount of text recalled and questions answered correctly. Study 2 investigated the extent to which information was retained and whether text coherence, engagement, or a combination of both affected pupils of varying reading comprehension levels (upper level and middle level reading ability) differentially. Procedures for administering and scoring were identical to those used in Study 1. Findings indicated a continuum of increased pupil performance from original silent text, to original text with think-alouds, to revised text read silently, to revised text with think-alouds. Middle level readers who used the revised text had similar performances to their upper level peers who read the original textbook version. Children who read the revised text tended to make better connections between recalled information than did children who read the original.

CALVO, MANUEL G., & CARREIRAS, MANUEL. (1993, August). Selective influence of test anxiety on reading processes. *British Journal of Psychology, 84*, 375–388.

Explores the influence a reader's emotional reactivity to stress pressures has on cognitive operations involved in reading comprehension, estimating the amount of working-memory resources demanded by test anxiety and determining what specific processes are affected by text anxiety. Subjects, 36 university undergraduates who were selected on the basis of two convergent measures of test anxiety, were tested using a moving-window technique, allowing collection of reading times for reading each individual word that had previously been analyzed for psycholinguistic attributes such as length and frequency. All subjects read 1 practice passage, followed by 2 narrative and 2 expository texts. Half of the subjects received a summary preceding each text. Subjects cued each word of the text so that only one word was visible on the computer screen at a time and no regressions were possible. Oral directions were

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given to simulate typical evaluative stress conditions. Manipulated factors (summary, narrativity, and test anxiety) and parameters such as word length, graphemic frequency, repetition, lexical frequency, polysemia, sentence length, and text and layout variables were predictors in multiple regression analyses. Word-level variables, sentence-level parameters, and 4 of the text-level variables had a significant impact on reading times. Anxiety had a significant effect on word-reading times but not on comprehension. Word-reading times were influenced interactively by test anxiety and by specific text characteristics: position of words within a clause, serial position within a text, narrativity, and summary. The researchers concluded that anxiety is selectively detrimental to the efficiency of text-level processes, but does not impair low-level processes much as encoding and lexical access.

CHI, FENG-MING. (1995). EFL readers and a focus on intertextuality. *Journal of Reading*, *38*, 638–644.

Demonstrates how 10 proficient college level Taiwanese EFL readers use their previous experiences with text to intertextualize two short stories having similar lengths and themes. Three types of data were collected: verbal reports during reading when students stopped at the end of each paragraph and reported what they thought and felt; postreading oral responses after the students reread the text; and oral interviews where students were asked about any links made to other stories that they had read while reading the current texts. Transcripts were scored independently by the researcher and two EFL teachers. Four patterns appeared to illustrate the way participants employed intertextuality to interpret or comprehend the texts: storying, integrating, evaluating, and associating. Subjects used different intertextual strategies on the two texts and at the different times, during reading, after first reading, and during final interviews. Subjects linked the current literary texts to autobiographical experiences, to TV programs and movies, to other print forms, and to songs and paintings. Vignettes are included to illustrate examples of storying, integrating, evaluating, and associating.

DAVIS, JAMES N., & BISTODEAU, LINDA. (1993, Winter). How do L1 and L2 reading differ? Evidence from think aloud protocols. *Modern Language Journal*, *77*, 459–472.

Asks whether the reading process is different in an individual's native language (L1) from that in the nonnative language (L2). Data were collected from 8 native readers of English (NRE), all fourth and fifth semester undergraduate French students, and 8 native readers of French (NRF), all graduate students at a U.S. university. Subjects were asked to think aloud as they read 2 different texts, one in the L1 and the other in the L2. Each sentence of the 2 texts was typed on a separate card, and subjects were instructed to say whatever came to mind as they read each card. Following the reading of each passage, subjects were asked to write a recall protocol. Think-aloud protocols were transcribed and divided into idea units and placed into 13 strategy categories. Categories were further combined into bottom-up, top-down, and metacognitive strategies. Data were analyzed both quantitatively and qualitatively. Findings indicated that the limited proficiency of the NRE readers in the L2 altered their reading strategies. The NRE group made significantly more individual word focus (bottom-up) comments when reading in their L2 than when reading in their L1. NRF gave more top-down comments across both L1 and L2. There were 3 times more top-down than bottom-up reported strategies in the L1 protocols than in the L2 protocols where more bottom-up strategies were reported. Qualitative analysis showed that individual readers differed in the types and combinations of strategies they reported using when a word was identified as unknown.

HORIBA, YUKIE; VAN DEN BROEK, PAUL W.; & FLETCHER, CHARLES R. (1993, September). Second language readers' memory for narrative texts: Evidence for structure-preserving top-down processing. *Language Learning*, *43*, 345–372.

Studies the extent to which L2 readers of English use structural properties of text in their mental representations and whether they use the structural information to deduce the meaning of text components. Four structural factors were examined: causal-chain status, number of causal connections, story-grammar category, and hierarchical position. Participants included 47 L2 Japanese senior high school students in their sixth year of studying English as a foreign language and a control group of 72 American college students. Students received written instructions in their native language to read 4 stories silently. Following the last story, they were to write everything they recalled from the texts. Protocols were matched against idea units in the original stories with 2 criteria used to assess L2 readers' levels of representation: meaning-preserving recall and structure-preserving recall. The former gave credit for information that was either verbatim or a close paraphrase of the original; the latter gave credit for information that fulfilled the same structural function as the original text unit. L2 readers' structure-preserving recall was found to be greater than their meaning-preserving recall, with structure-preserving recall reflecting the influence of structure variables. The effects of particular structural properties interacted with the scoring criterion, suggesting that L2 readers used top-down processing to preserve the structural integrity of text.

CALERO-BRECKHEIMER, AYXA, & GOETZ, ERNEST T. (1993, July/September). Reading strategies of biliterate children for English and Spanish texts. *Reading Psychology, 14*, 177–204.

Examines strategies used by biliterate third and fourth grade pupils reading stories in Spanish and in English. Subjects were 26 third and fourth graders in the bilingual education program at one elementary school. To be included, pupils had to perform at least at the second grade level in both languages on the Instrument for the Diagnosis of Reading. Two stories were selected, and each was prepared in English and in Spanish. In individual sessions, children read all materials in one language; a week later, they read materials in the second language. Order of language presentation and of story were counterbalanced. Stories were presented one line at a time on a computer screen. Following each story, pupils (1) were asked to tell what strategies they had used to comprehend the text, (2) completed a strategy use checklist, (3) retold the story, and (4) answered 9 multiple-choice questions on each story. ANOVA procedures resulted in no significant effects for story language, counterbalancing condition, or interaction for the number of strategies reported on the checklist or the interview. Children tended to use the same number and type of strategies in each language. Reading times and retellings did not differ for the two languages, although pupils answered more multiple-choice questions correctly for the English versions. Reported strategy use was found to be related to comprehension in both languages.

IV–22 Comprehension research

BECK, ISABEL L.; MCKEOWN, MARGARET G.; & WORTHY, JO. (1995). Giving a text voice can improve students' understanding. *Reading Research Quarterly, 30*, 220–238.

Compares comprehension and retention effects of reading expository and voiced versions of a text varying in coherence. Subjects were 164 fourth graders from 3 elementary schools. The subjects were ranked on the basis of their reading comprehension performance on the MAT and then assigned in turn to 1 of 4 conditions, each representing either an expository version of a text passage or a voiced version. The 2 expository versions included the original passage from a social studies text and the same passage revised for greater clarity and coherence. The 2 voiced versions additionally introduced the features of dialogue and colloquial language to each of the expository versions. Comprehension was assessed immediately

and 1 week after reading by asking the children in each condition to recall the passage they had read and to respond to open-ended questions pertaining to it. In both the immediate and delayed situations, ANOVA results yielded no significant differences among the 4 test groups for comprehension of easily accessible information. The voiced coherent passage was superior over all other conditions in eliciting recall and responses to issues. The original passage revised for coherence did elicit better recall than the unrevised original or its voiced counterpart. This finding was significant in the immediate condition and approached significance in the delayed condition.

SADOSKI, MARK; GOETZ, ERNEST T.; & AVILA, ENRIQUE. (1995). Concreteness effects in text recall: Dual coding or context availability? *Reading Research Quarterly, 30*, 278–288.

Reports two experiments investigating the recall of concrete and abstract paragraphs about historical figures. Subjects were 40 and 24 undergraduates, respectively, for Experiment 1 and Experiment 2. In Experiment 1, subjects read two passages about historical figures, with both passages being either concrete or abstract. Paragraphs were equated for number of sentences, words, syllables, and mean sentence length. Subjects were assigned randomly to either concrete or abstract passages. Following the timed reading of both paragraphs, participants were to write everything they could recall. Recall protocols were scored for gist, elaboration, and distortion. A between-subjects main effect for concreteness favoring recall of concrete paragraphs was found. Recall was increased or decreased by the effect of familiarity. Materials in Experiment 2 were the same as those in the first experiment. Procedures differed in that all subjects received a concrete passage about one historical figure and an abstract passage about the other historical figure. A within-subject concreteness effect favoring recall of concrete passages was noted. Results from the two experiments are interpreted as being more consistent with the dual coding view as opposed to the context availability view of the effect of concreteness on recall.

SCHRAW, GREGORY; BRUNING, ROGER; & SVOBODA, CARLA. (1995, March). Sources of situational interest. *Journal of Reading Behavior, 27*, 1–17.

Proposes a multicomponent framework for understanding situational interest and uses the framework to predict the relation among sources of interest, perceived interest, and text recall. Participating were 154 undergraduates enrolled in introductory educational psychology classes. Materials consisted of (1) a 30-item Likert scale sources of interest questionnaire (SIQ), (2) a 10-item Likert scale perceived interest questionnaire (PIQ), (3) an 800-word text, and (4) a free recall test booklet. The purpose of the SIQ was to evaluate 6 sources of interest: ease of comprehension, text cohesion, vividness, engagement, emotiveness, and prior knowledge. The PIQ was used to assess overall situation interest in the content and issues raised by the text; it focused entirely on assessments of the text's content and structure. The passage, containing both expository and narrative elements, was parsed into 116 propositions and 137 propositional modifiers. Subjects, tested in groups, were to read the passage, respond to the SIQ and then the PIQ, and complete a written recall of the passage. Using factor analysis and hierarchical regression analysis, it was determined that ease of comprehension, vividness, and engagement explained half the variation in perceived interest. Perceived interest explained 18% of the variance in text recall. Only ease of comprehension was related to recall once perceived interest was controlled. Prior knowledge ratings were only marginally related to perceived interest and were unrelated to recall.

HUITEMA, JOHN S.; DOPKINS, STEPHEN; KLIN, CELIA M.; & MYERS, JEROME L. (1993, September). Connecting goals and actions during reading. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 19*, 1053–1060.

Reports three experiments connecting goals and actions during reading to investigate the competing constructionist and minimalist positions on how information is stored in memory. Experiment 1 determined whether actions cause reactivation of goals when the intervening material consists of actions relevant to the goal that are either consistent or inconsistent. College subjects ($n = 32$) were slower to read a line describing actions that were inconsistent with goals than they were to read consistent actions, even if both goals were locally coherent. In Experiment 2 intervening materials involved actions or locations that were unrelated to the goal. Data suggested that college students ($n = 32$) reactivated the goals even when the intervening materials were inappropriate and that they had to do considerable inferencing to connect the target statement with the earlier goal statement. Experiment 3 involved shifting focus in the intervening materials and the introduction of a second goal in the intervening lines. Subjects ($n = 57$ undergraduates) responded more slowly but again accessed the earlier information. The researchers concluded that reading a sentence can reactivate relevant information from earlier in the text even when the sentence is coherent with the immediate context and several lines of unrelated text have intervened. It is suggested that the data share assumptions with the minimalist view and that readers do access information from earlier in the text and apply the information to concepts and propositions currently being read.

RICE, GARY E. (1994). Examining constructs in reading comprehension using two presentation modes: Paper vs. computer. *Journal of Educational Computing Research, 11*(2), 153–178.

Reports studies investigating whether the constructs of reading comprehension are the same when they are presented at the computer or on paper. Subjects were undergraduate and graduate students enrolled in summer classes. In Experiment 1, subjects were placed in 1 of 4 groups: 2 groups read a causal passage and 2 read a collection passage that had been used in previous text research studies. In each rhetorical type, 1 group read from paper and 1 from computer. After reading, subjects completed an open-ended probed recall task in immediate and delayed conditions. Recalls were scored for idea units and rhetorical units. Constructs were the same for passage type in both recall conditions. There was greater recall of ideas in causal passages than in collection passages. No differences were found for presentation mode. A second experiment investigated whether constructs were similar when highlighting procedures were added. Subjects were instructed to highlight information they thought would be important to remember. No significant differences were found for text type but a greater number of units were highlighted in the paper presentation than in the computer presentation. It is concluded that reading comprehension constructs appear to be the same between computer and paper presentations of text, but different processes are used when readers interact with the text through highlighting.

GILLINGHAM, MARK G. (1993, Fall). Effects of question complexity and reader strategies on adults' hypertext comprehension. *Journal of Research on Computing in Education, 26*, 1–15.

Describes what happens when a group of undergraduates read hypertext with the goal of answering specific questions. Subjects, 30 undergraduates enrolled in an upper level psychology course, were participating as part of their coursework. Students read a binary-tree structured hypertext on the topic of cosmology; they were to answer three 2-part questions based on the text. Questions differed in difficulty as a function of the complexity of their traversal paths. Data collected included responses to the three questions, traversal paths, time spent in hypertext nodes, and time spent at questions. Traversal path information was used as a measure of efficiency and consisted of the list of nodes, important and extraneous, selected by the subject. Reading hypertext

proved difficult for a number of subjects. More successful readers selected important text nodes more often and read them for a longer time than did less successful readers. Readers who adopted a depth-first strategy were more successful than readers who used a breadth-first search strategy. Students who reinspected their responses tended to be more successful.

RABIA, SALIM ABU, & SIEGEL, LINDA S. (1995, January/March). Different orthographies different context effects: The effects of Arabic sentence context in skilled and poor readers. *Reading Psychology*, *16*, 1–19.

Investigates whether Arabic orthography differs from an alphabetic orthography in its effects on poor and skilled readers' use of context. Arabic texts are typically presented without vowels to skilled readers and with vowels to younger and beginning readers. Arabic vowels are not alphabetic letters but rather strokes above or below the letters. The subjects were 40 eighth graders, 20 poor readers and 20 skilled readers of Arabic. Subjects were required to read 20 sentences in Arabic, 10 with voweled words and 10 with unvoweled words. However, each of the 20 sentences began with an unvoweled word that could have several meanings without its vowels. Each subject read the confounded initial word with the remainder of the sentence blocked. When the rest of the sentence was displayed, subjects were allowed to correct themselves. The result indicated that skilled and poor readers significantly improved their reading accuracy when they read voweled and unvoweled words in context. Further, skilled readers significantly improved their reading of voweled and unvoweled words in context more than did the poor readers, a finding contradictory to research with Latin alphabetic orthography.

MATHES, PATRICIA G., & FUCHS, LYNN S. (1993). Peer-mediated reading instruction in special education resource rooms. *Learning Disabilities Research & Practice*, *8*(4), 233–243.

Studies the effects of peer-mediated repeated reading and sustained reading and examines the effect of the level of text difficulty on the reading fluency and comprehension of LD children. Participants included 12 upper elementary and middle school special education resource room teachers and 67 fourth through sixth grade pupils identified as LD. The 2 experimental peer-mediated groups participated in instruction 3 days a week for 10 weeks; a control group received typical reading instruction. The Comprehensive Reading Assessment Battery (CRAB), consisting of four 400-word folk tales, was used as a pre- and posttest measure of reading achievement. Scores derived from the CRAB include the average number of words correctly read orally in 3 minutes, the average number of correct responses to 10 comprehension questions following a 3-minute timed reading of a story, and the number of maze items correctly replaced during a 2-minute maze activity. Results suggested that peer-mediated sustained reading may be superior to typical reading instruction in developing fluency. Neither experimental method was superior to typical instruction for reading comprehension. The repeated-reading group did not perform better than controls or the sustained-reading group on either measure. No effect was found for level of text difficulty or for the interaction of text difficulty and the peer-mediated techniques.

WHITE, BRIAN F. (1995, January/February). Effects of autobiographical writing before reading on students' responses to short stories. *Journal of Educational Research*, *88*, 173–184.

Asks if autobiographical writing prior to reading enhances students' comprehension and discussion of literature. Participants were students in 4 freshmen English classes, 2 from each of 2 different high schools. In a counterbalanced design, students in each class read 2 short stories, 1 with and 1 without a prereading-writing assignment. The students in each class were later audiotaped as they discussed each story. Transcripts of class discussions were analyzed us-

ing a 2 × 2 × 2 (treatment × story × teacher) factorial design to determine class differences in descriptive responses to questions pertaining to characters in the stories. Specifically, the responses were evaluated as to whether they offered surface information about the characters that could be readily found in the texts or inferences about the characters stemming from abstract thinking on the part of the students. Also analyzed were differences in off-task and contentless comments by students during each class discussion. Results of the analyses showed autobiographical writing prior to reading produced fewer off-task and contentless responses on the part of students in each class. Students in this treatment condition also offered more inferential descriptions pertaining to the characters compared to the students in the control condition.

LORCH, ROBERT F., JR. (1993, September). Integration of topic and subordinate information during reading. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 19*, 1071–1081.

Examines, in 4 experiments, how readers integrate subordinate information with relevant context as they read. Subjects in all experiments were volunteers from introductory psychology classes and numbered 100, 48, 48, and 48, respectively. Subjects read texts one sentence at a time with occasional interruptions lasting 30 seconds. Following a distractor task, they resumed reading after being reminded of the topic sentence of the last paragraph they had read (topic cue condition), or being reminded of the last sentence they had read (local cue condition), or receiving no reminder of what they had been reading (no cue condition). Reading times on the first sentence following interruption were faster in the 2 cue conditions than in the no cue condition (1) when the topic and local cues supplied missing referents for the target sentences, (2) when the target sentences were written to be understood as independent statements, and (3) whether the target sentences were embedded in short or long texts. Findings are interpreted as suggesting that readers integrate subordinate information with relevant topics as well as with the immediate local context.

HAENGGI, DIETER, & PERFETTI, CHARLES A. (1992, June). Individual differences in reprocessing of text. *Journal of Educational Psychology, 84*, 182–192.

Explores the roles of basic reading processes and prior knowledge in reprocessing of expository text. Subjects were 48 undergraduate students, divided into above-average and average readers on the basis of a composite score of reading ability. Two sessions, one lasting 2 hours and one lasting 1 hour, were used in collecting data. Subjects were asked to perform individually (1) a vocalization task in which they were to read orally 40 high-frequency and 40 low-frequency words, and 40 pronounceable pseudowords; (2) a probe discourse task in which they read a 700-word text, followed by a recall of target words; (3) a prior knowledge task; (4) a reading task consisting of 8 pages of text with instructions to take notes or not to take notes, and 24 hours later they were asked to rewrite notes, to reread notes, or to reread the text; and (5) a reading comprehension task consisting of 2 different versions of a sentence verification and a multiple-choice comprehension test. Rewriting notes, rereading notes, and rereading the text were found to be equally effective for improving reading comprehension performance of text explicit and text implicit information. Reading ability and prior knowledge were more predictive of comprehension than was the type of reprocessing activity. Working memory played the major role for comprehending text-implicit information, whereas prior knowledge was more important for explicit and script implicit information.

CALFEE, ROBERT C.; DUNLAP, KRISTY L.; & WAT, ALBERT Y. (1994). Authentic discussion of texts in middle grade schooling: An analytic-narrative approach. *Journal of Reading, 37*, 546–556.

Presents 2 representative lessons collected in middle school level classrooms of 10 teachers in urban schools in California. The protocols presented come from 2 sixth grade

classrooms and are used to illustrate the methodology of the narrative analytic technique. Both lessons revolve around discussions of stories read. The transcript of the discourse and the observers' commentary are presented. In particular the excerpts are offered to point out that the most animated and engaged interactions observed in the study were still variations on a traditional recitation theme; no exemplary instances of metadiscourse were seen during the videotaping of the 10 classrooms. In all instances the teacher controlled the discourse and managed the direction of inquiry. It is felt that classroom interaction can be used to stultify disciplined discourse in spite of challenging curriculum frameworks, innovative textbooks, and other materials. An example from an 11th grade English class is offered as being indicative of a student-centered and inquiry-oriented discussion.

McCutchen, Deborah, & Crain-Thoreson, Catherine. (1994, August). Phonemic processes in children's reading comprehension. *Journal of Experimental Child Psychology, 58*, 69–87.

Investigates children's use of phonemic cues as they read for comprehension. Subjects were 28 second graders and 28 fourth graders from 2 urban parochial schools. Within each grade, half the children were identified as skilled readers and half as unskilled. Methodology involved use of the tongue-twister paradigm whereby children silently read sentences that were sensible (control sentences) or nonsensical due to repetition of word-initial phonemes (experimental sentences). The sentences were presented one at a time on a computer monitor, and children indicated whether the sentences made sense. Fourth grade children participated in an additional sentence acceptability task designed to tap sentence recall. Repeated measures ANOVA and multivariate MANOVA findings revealed fourth graders read the sentences more quickly than second graders and skilled readers more quickly than less skilled readers across groups. At both grade levels, acceptable sentences were read more quickly than unacceptable ones. Findings suggest that phonemic information is activated during silent reading comprehension. No effects were apparent for phonemic repetition in the second task, suggesting memory as the locus of the tongue-twister effect.

Norris, Stephen P., & Phillips, Linda M. (1994, November). Interpreting pragmatic meaning when reading popular reports of science. *Journal of Research in Science Teaching, 31*, 947–967.

Looks at data from 91 grade 12 students who were completing high school science courses to determine how aspects of their scientific epistemologies (truth, the metalanguage of science, and the structure of scientific reasoning) affected their interpretations of popular reports of science that a scientifically literate public should be expected to read with understanding. In a pilot study and subsequently in a main study, students read texts from popular science magazines and newspapers and completed constructed-response and multiple-choice assessments. Students also made 3 decisions about the pragmatic meaning of declarative sentences that were written to accompany each report. Data indicated that certain epistemological beliefs of the students interfered with their interpretations of the texts. Students attributed more certainty to the statements in the reports than was expressed by the reports' authors. They had difficulty understanding the chain of reasoning in the reports and the connections between ideas. Fewer than half the students made the correct links between statements, even though they could determine meaning of individual isolated statements. Most students also had difficulty using the metalanguage of science.

Leal, Dorothy J. (1994). A comparison of third-grade children's listening comprehension of scientific information using an information book and an informational storybook. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects*

of literacy research, theory, and practice (pp. 137–145). Chicago, IL: National Reading Conference.

Examines differences in listening comprehension between children who were read an information book and those who were read an informational storybook. Ninety-six third grade subjects were drawn from 8 classrooms in 4 elementary schools in a metropolitan area. Within each group, 6 children were assigned to a study group and 6 to a control group, both balanced for gender and ability. Each group was given orally a pretest consisting of 10 multiple-choice questions based on the topic of the text. The books were then introduced and read aloud to each group, the informational storybook to the study groups and the information book to the control groups. Immediately following and 6 weeks later, groups were administered a posttest of 10 questions. The procedure was conducted using 2 different topics (earth science and space science). Pre-, post-, and delayed test scores were used in tests of significance. Results indicate that text type was a significant influence on children's listening comprehension of scientific information in favor of the group that listened to the informational storybook.

FARNAN, NANCY, & KELLY, PATRICIA R. (1994). A reader response perspective in social studies: A middle grades study. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 120–126). Chicago, IL: National Reading Conference.

Applies reader response theory to 47 middle schoolers' construction of meaning during a 6-week social studies unit. Two heterogeneous seventh grade classrooms from a suburban middle school participated in the study. The teacher used the social studies text supplemented with trade books. Children were read to, provided background knowledge prior to independent readings, wrote reader responses, participated in small and large group discussions, and completed project work. Two trained readers analyzed 2 journal entries and the final essay for each pupil. All writing was analyzed for efferent (factual, text-based) and aesthetic (feelings, attitudes, personal associations) perspectives. Results indicate that 72% of journal entries displayed patterns of thinking representative of an aesthetic stance toward reading, whereas only 40% of the essays displayed evidence of an aesthetic stance. A connection between the 2 types of written responses emerged. The majority of pupils incorporated their earlier journal entries in their final essay, hence making personal connections and integrating with text-based information rather than restating factual information.

BROCK, CYNTHIA H., & RAPHAEL, TAFFY E. (1994). Mei: Constructing meaning during a sixth-grade social studies unit. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 89–100). Chicago, IL: National Reading Conference.

Describes the second part of a 4-year case study of Mei, a sixth grader from Vietnam, as she constructs meaning within a social studies unit. Mei began third grade in the United States and was not yet proficient in English. The sixth grade classroom comprised 21 children representing a range of ethnic backgrounds, the majority being Caucasian. Data were collected biweekly for 3 months to determine Mei's overall middle school experience and then focused on a 3-week social studies unit. The instruction used the social studies text and worksheets on a regular basis and a culminating small group project. During the unit, observations were conducted 4 days a week. Data sources included field notes from classroom observations and visits to Mei's home; audiotapes of conversations and interviews with Mei, all of her teachers, and her family; written work; test and report card scores; and think-aloud transcripts. Classroom context played a key role in shaping Mei's knowledge construction process in her social studies unit. Mei demonstrated sophisticated strategies for successfully engaging in content-area instruction, which were influenced by her earlier elementary school reading program. She was

responsive and adaptive to the classroom expectations for achievement in this unit by employing strategies that aided memorizing facts rather than learning concepts.

MARIA, KATHERINE, & JUNGE, KATHLEEN. (1994). A comparison of fifth graders' comprehension and retention of scientific information using a science textbook and an informational storybook. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 146–152). Chicago, IL: National Reading Conference.

Asks if fifth-grade children who read an informational story will recall more informational ideas than those who read a textbook containing many of the same ideas. Subjects were 51 fifth graders from 3 intact classrooms in a suburban public school. Pupils were categorized as good (n = 20) or poor readers (n = 31) on the basis of total CTBS scores. Within each class, children were assigned randomly to read a photocopy of either a storybook or a section of a chapter from the fourth grade science textbook. Immediately after reading the selection silently, children wrote a recall. One week later pupils completed a short-answer test containing 14 items related to the topic of the texts and made a diagram. ANOVA procedures and t tests were employed to explore group differences. The children wrote longer recalls of the informational story than of the textbook; however these recalls did not contain more informational ideas. Even good readers included few informational ideas in their recalls of both types of text.

HACQUEBORD, HILDE. (1994, September). L2-reading in the content areas: Text comprehension in secondary education in the Netherlands. *Journal of Research in Reading, 17*, 83–98.

Reports a longitudinal study with 88 Turkish L2 and 89 Dutch L1 students as subjects to determine if there are differences in their verbal and nonverbal characteristics and their comprehension of texts at the beginning of their secondary school career and over time. Subjects were enrolled in 2 kinds of schools: Lbo (lower vocational training) and Mavo (lower middle general education). Tests administered included receptive vocabulary, grammar, nonverbal IQ (Raven's Progressive Matrices), background knowledge about text topics in geography and social studies, and tests over comprehension of schoolbooks. Univariate and multivariate analyses were performed. Longitudinal results were analyzed using repeated measures. On all variables except background knowledge and nonverbal IQ, the Turkish students had lower performance than the Dutch students. Students in Lbo schools scored lower than students in Mavo schools, but Turkish Mavo students were superior to Dutch Lbo students in nonverbal tests and on text comprehension, suggesting school type is important for development of cognition and comprehension. Turkish students seem to use more of a top-down reading style than do Dutch students, thus processing micro and macro subtests differently. Turkish students' scores in text comprehension declined over time, whereas their scores in nonverbal IQ and vocabulary increased. The researchers concluded that school type plays a significant role in the development of learners, and the absence of reading training contributes to decline in performance.

MACMARTIN, MORAG. (1994). Factors affecting reading comprehension in primary pupils. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 124–132). Cheshire, England: United Kingdom Reading Association.

Explores factors that impede understanding or hinder progress of elementary school children during independent reading. Subjects were 80 pupils equally drawn from 8 classrooms in rural and urban schools. Twenty pupils in each of the 4 age groups, 8–11 years, formed the experimental group. Groups were matched on sex and scores falling in the average

range on the Primary Reading Test. Test passages were 4 excerpts (120 words each), which varied by 6 years in difficulty. After reading the passages independently, pupils gave free recalls in written and illustrated form. The free recalls were analyzed according to a classification scheme developed in an earlier pilot study. Errors, deviations from author's intent, could be coded in 1 of 4 categories: (1) child centered (influence of previous knowledge); (2) text centered (discrimination errors); (3) caused by surface reading (literal level); or (4) derived from effort after meaning (justifications). Five main effects were tested for significance: text, age, mode of presentation, ability, and location. The greatest effects on comprehension were due to text and mode of presentation, factors which are controlled by the teacher. Comparatively few effects were found due to age and ability.

IV–23 Research design

ALMASI, JANICE F.; PALMER, BARBARA MARTIN; GAMBRELL, LINDA B.; & PRESSLEY, MICHAEL. (1994, Fall). Toward disciplined inquiry: A methodological analysis of whole-language research. *Educational Psychologist, 29*, 193–202.

Conducts a methodological analysis of the available research on whole language in order to assess the strengths and weaknesses of the research base. Twenty-five studies were included for evaluation, 19 of which were determined to be quantitative in nature and 6 qualitative in nature. Quantitative studies were evaluated on 26 criteria relative to (1) the validity and reliability of the data collected, (2) the process used in the investigation, and (3) the empirical grounding of theory. Qualitative studies were evaluated on 53 criteria for (1) reliability of the data, (2) the adequacy of the research process for testing theory, and (3) the empirical grounding of the research findings. Each author read each article independently and evaluated the articles on the criteria. Ratings were then compared and discrepancies reviewed and resolved. In general, quantitative studies dealt with reliability issues and empirical grounding adequately. However, the quantitative studies tended to neglect issues of validity. The quality of the qualitative studies tended to be higher that of the quantitative research. Some of the qualitative research fell short with respect to establishing the credibility of the data and describing the process used to derive categories.

STAHL, STEVEN A.; MCKENNA, MICHAEL C.; & PAGNUCCO, JOAN R. (1994, Fall). The effects of whole-language instruction: An update and a reappraisal. *Educational Psychologist, 29*, 175–185.

Presents an updated meta-analysis of whole language research conducted since 1988 and reviews the effects of the movement on achievement. Included for the analysis were 45 studies comparing whole language and traditional approaches to reading, with 17 of these in the form of a dissertation abstract only. Only 14 had numerical data; only 20 used any measure of reading achievement, and 22 affective measures such as attitude toward reading or self-esteem. Comprehension measures used tended to be conventional in nature, either a passage-and-question type measure or a cloze procedure. On standardized reading comprehension and word recognition measures, a small effect size favoring whole language approaches was found. Although 17 studies used attitude surveys, only 2 found significant differences in favor of whole language and 1 found significant differences favoring the traditional approach; the remaining 14 studies found no differences between the 2 approaches. The authors felt that whole language approaches appeared to have a small positive effect on reading comprehension but that there were no differences between approaches on measures of attitude, orientation toward reading, or writing.

HARRIS, VIOLET J. (1994). Multiculturalism and children's literature: An evaluation of ideology, publishing, curricula, and research. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 15–27). Chicago, IL: National Reading Conference.

Examines major trends in multiculturalism and children's literature through a review of research. Topics discussed are (1) the current status of children's literature and trade book publishing; (2) critical theories that illuminate and critique multiculturalism in new ways; (3) authorial perspectives; (4) curriculum; and (5) research. It was felt that research on multicultural literature needs to exhibit greater rigor and include both content analyses and studies that examine the ways in which texts are used in classrooms. Such research must be grounded in explicit theoretical or philosophical frameworks.

V. The teaching of reading

V–1 Comparative studies

KIBBY, MICHAEL W. (1995). *Student literacy: Myths and realities*. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Reviews the literature on trends in reading achievement from 1840 to the present. Presents data to support the thesis that the decline in students' reading abilities is a myth. It is noted that the SAT is not a valid basis for assessing national achievement levels, but that three primary data sources do exist for comparing then and now reading abilities: (1) then and now studies, (2) test standardizations, and (3) National Assessment of Educational Progress. Information from each of the three sources is discussed.

Reading Today. (1995, June/July). NAEP reading data show little change. *Reading Today*, *12*, 1, 4.

Uses preliminary data from the 1994 National Assessment of Educational Progress (NAEP) to show little change from 1992 data in the reading proficiency of students at the fourth, eighth, and twelfth grade levels in the United States. Among the findings were 25% of fourth graders, 28% of eighth graders, and 34% of twelfth graders reached the proficient level, indicating solid academic performance; 5% at each level reached the advanced level, indicating superior performance; and 30% at each grade level failed to reach basic level, indicating a partial mastery of prerequisite knowledge and skills. Females displayed higher reading achievement than males, reading scores were higher for students whose parents were more educated, and students in nonpublic schools outscored their public peers in reading. High scoring states are reported, as are those whose scores declined.

DAVIES, JULIE; BREMBER, IVY; & PUMFREY, PETER. (1995, February). The first and second reading Standard Assessment Tasks at Key Stage 1: A comparison based on a five-school study. *Journal of Research in Reading*, *18*, 1–9.

Assesses the value that can be placed on the national reading Standard Assessment Task scores as indicators of what British children are achieving in reading and whether reading standards are rising. The results of a cross-sectional study of a sample of all the year 2 children (171 in 1991; 171 in 1992) from 5 randomly selected primary schools within one local education authority are presented. Pupils' scores on the Primary Reading Test (PRT) were compared with the reading Standard Assessment Task scores from the previous half term. Results

showed an improvement in the attainment level of children in 1992 compared with those in 1991 on Standard Assessment Tasks, with a higher percentage achieving Level 3 (above average) and a smaller percentage at Level 1 (below average). However, examination of the means for each year indicated that the mean PRT score for each Standard Assessment Task level was significantly lower in 1992 than in 1991. The researchers concluded there is a need to view apparently rising standards, as measured solely by the Standard Assessment Task results, with a degree of caution.

ALLINGTON, RICHARD; GUICE, SHERRY; BAKER, KIM; MICHAELSON, NANCY; & LI, SHOUMING. (1995, Spring). Access to books: Variations in schools and classrooms. *Language and Literacy Spectrum, 5*, 23–25.

Compares the library collections of 6 elementary schools in 5 districts that serve low-income children and 6 comparison schools that enroll less than 10% poor children. Schools with fewer low-income children averaged 21.5 volumes per child, exceeding the American Library Association's (ALA) minimum recommendation of about 20 volumes per child. Schools with relatively more low-income children averaged 15.4 volumes per child; only 1 of these schools met the ALA standard. Similarly, children from high-poverty schools had access to an average of 22 magazine subscriptions compared with 38 in more affluent districts. Most of the high-poverty schools made only 50 to 100 books available; the school with the greatest concentration of low-income children had the smallest classroom libraries (25 to 50 books). Classrooms with the largest collections were those in which the teacher reported purchasing most of the books. Access to the library in high-poverty schools was usually restricted to a single weekly visit. Several high-poverty schools restricted the number of titles that children could borrow.

POLLAND, MARK (1993). Results from the right side up test: A cross-cultural study of young children in the United States and China. In Philip H. Dreyer (Ed.), *Learning from learners: Fifty-seventh yearbook of the Claremont Reading Conference* (pp. 151–160). Claremont, CA: Claremont Graduate School.

Tests preschool children's knowledge of the elementary components of different writing systems prior to formal language instruction. The sample included 85 children, ages 2 to 4 years, attending preschools in the United States ($n = 44$) and China ($n = 41$). These settings were selected based on their willingness to participate in the study. The test, Right Side Up, was designed specifically for the study and asks children to turn a set of 10 pictures, then 10 letters, then 10 Chinese characters, one at a time to the correct upright position. The test was designed to allow even preverbal children opportunities to express their earliest knowledge about writing components. The study found that the young children demonstrated a number of things that children know about writing systems before they ever receive formal language instruction. On the positioning characters, American and Chinese children scored similarly (71% and 67%, respectively). Chinese children scored 43% accurately on English letters and American children scored 34% with Chinese characters.

MACGREGOR, MOLLIE, & STACEY, KAYE. (1995, February). Literacy in a mathematical context: A comparison of adults' and students' performance. *Australian Journal of Language and Literacy, 18*, 19–29.

Compares performance of Australian secondary students and Australian adults to determine how well they perform on document and quantitative literacy tasks and to determine what factors influence the difficulty of the reading of each type of materials. Administered was an adaptation of a previously published problem-solving and comprehension measure. Tests were given to a representative sample from 22 secondary schools; students were in mixed-

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ability classes and ranged in age from 12 to 15. Students' success rates were consistently above those of the adults. Items requiring locating information rather than carrying out numerical operations were easy for both groups. Questions where adults scored lower than 90% usually involved reading information from several rows and columns, calculating multiple operations, and determining relations between given and required information.

V–2 Status of reading instruction

BRIDGE, CONNIE A. (1994). Implementing large scale change in literacy instruction. In Charles K. Kinzer and Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 257–265). Chicago, IL: National Reading Conference.

Studies how primary schools progressed toward full implementation of Kentucky's newly mandated reading and language arts program. Observations were conducted in a geographically stratified random sample of 46 primary schools in the 8 regional service center areas in the state. A structured observation guide organized around the following elements of the state mandate was used: (1) developmentally appropriate practices; (2) multiage and multiability classrooms; (3) continuous progress; (4) authentic assessment; (5) qualitative reporting methods; (6) professional teamwork; and (7) positive parent involvement. The observations produced numerical ratings for major aspects of the primary program and comments of the raters on observation protocols. Findings indicated that many teachers had begun to use the instructional practices recommended of the primary program. Many were observed replacing or supplementing the basal anthology with children's literature and trade books for reading instruction, providing frequent opportunities for children to write, and using the writing process approach. Assessment appeared to be the area in which teachers had not yet made great strides. In addition, there were many instructional practices that were incompatible with whole language beliefs and with one another. The long-term effects of the mandated change on teacher morale and pupil achievement are yet to be determined.

LOFTON, GLENDA, & HEAD, MARTHA. (1994). SPUR revisited: Five years after a state-funded reading improvement project, what pieces remain? In Bernard L. Hayes & Kay Camperell (Eds.), *Reading: Putting the pieces together* (pp. 53–64). Athens, GA: American Reading Forum.

Presents follow-up data on whether districts and schools involved in a state-funded improvement project continue to implement and maintain the essential elements of the project 5 years after the termination of the external support. Maintenance of an ongoing improvement process and long-term benefits were determined through a 3-phase study: (1) Phase 1 involved a survey of participating districts and schools serving as model schools when the project ended; (2) Phase 2 included on-site visits to 6 districts; and (3) Phase 3 analyzed student achievement data. Results presented focus on the data derived from on-site visits, observations, and interviews. The district played an active role in the improvement process through a planning team that assessed the strengths and needs and collaboratively developed a written plan for improvement. The plan included an emphasis on building comprehensive reading programs and ways that the district would support the schools in implementing the process. At the school level, 9 out of 12 schools visited across the 6 districts had maintained an ongoing improvement process and demonstrated growth in the areas addressed. Factors that facilitated or impeded the maintenance of the improvement process included (1) understanding the improvement process, (2) level and types of district involvement, (3) leadership at the school level, (4) collaboration at all levels, (5) utilization and development of human re-

sources, (6) teacher and student self-efficacy, and (7) perceived benefits. Implications for future improvement efforts are described.

BIEMILLER, ANDREW. (1994). Some observations on acquiring and using reading skill in elementary schools. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 209–216). Chicago, IL: National Reading Conference.

Reviews 25 years of literacy research in addressing skill-oriented and holistic instructional approaches. The review begins with an overview of how readers develop efficiency in identifying words in print and describes curriculum experiments to increase word recognition proficiency. Concludes that the debate between whole language educators and skill-oriented educators revolves around the relative importance of acquiring procedures versus the importance of applying procedures in realistic contexts. Effective educators should ensure that children receive both holistic and skills instruction with careful attention to ensuring that more complex, authentic tasks draw on skills that children actually possess.

Reading Recovery in New Zealand : A report from the office of Her Majesty's Chief Inspector of Schools. (1994, Fall). *Literacy, Teaching and Learning, 1*, 143–162.

Reports findings of the study of the implementation of Reading Recovery (RR) in New Zealand by two senior members of Her Majesty's Inspectorate, representatives of the office of Her Majesty's Chief Inspector of Schools in England. Data were collected by observing RR lessons, teacher training classes, and primary school classrooms in Auckland, Wellington, and Christchurch; by interviewing educators; and by reviewing relevant documents. The summary of findings detailed procedures for implementation and confirmed that the majority of pupils who had received RR instruction in New Zealand had reached the objective of matching the average band of reading attainment. In addition, RR pupils have maintained their gains. It was also noted that pupils whose reading had improved as a result of the program were reported to have made related gains in confidence, school attendance, and in other subjects including mathematics. They also noted that indirect benefits of the program included the presence of a highly trained early years reading expert in almost every primary schooi and raised expectations concerning the limits of what is possible in reading progress. The authors attributed program success to the rigor of the teacher training, the comprehensive quality assurance structures, the coherence of its organization on a national scale, and the central provision of its funding. They concluded that there was good evidence to show that the RR program can work effectively in different educational structures.

PRESSLEY, MICHAEL. (1994, Fall). State-of-the-science primary-grades reading instruction or whole language? *Educational Psychologist, 29*, 211–215.

Reviews briefly the procedures and research related to the following 3 instructional alternatives to a whole language program: (1) programs to develop phonemic awareness, (2) Reading Recovery, and (3) comprehension strategies instruction. The author argues that the whole language program was conceived initially some 25 years ago, that it is obsolescent relative to reading instruction and research completed since the 1960s, and that the other three programs enjoy more empirical support than whole language. In particular, it is claimed, the arguments hold for at-risk primary grade children. It is held that such children are helped more in reading programs that offer more explicit instruction than whole language. In the discussion, the author presses for the blending of the best of whole language with more explicit decoding and comprehension instruction.

V–3 Emergent literacy

BARTLETT, CISSY, & MCBRIDE, LESA. (1995, Spring). Wordless books: The effect on reading and collaborative writing. *New Mexico Journal of Reading, 15*, 64–67.

Describes how children in two kindergarten classes focus on and bring personal meaning to the illustrations in wordless picture books. The classroom procedures included familiarizing children with a story, introducing a wordless book based on the story, jointly interpreting the pictures, and collaborating to write the story. The teachers worked with 8 pairs of children at different developmental levels. They noted that children who were at higher developmental levels were able to scan the illustrations for longer periods, read each page frame by frame, describe the illustrations in more detail, comprehend the picture text, expand on the story line, and draw on personal experience. In observations of the children who were at lower developmental levels, the teachers noted that they skimmed the illustrations, fluctuated on left to right orientation, did not read each page frame by frame, missed an abundance of detail, had difficulty interpreting text, and personalized the text to the extent of misinterpretation.

WHITEHURST, G.J.; EPSTEIN, J.N.; ANGELL, A.L.; PAYNE, A.C.; CRONE, D.A.; & FISCHEL, J.E. (1994, December). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology, 86*, 542–555.

Compares the efficacy of an altered and unaltered Head Start program. Sampled were 167 4-year-olds in 4 Head Start centers who completed a full year in the program. Classrooms were assigned randomly to intervention (n = 94) and control (n = 73) conditions. The intervention condition involved an add-on emergent literacy curriculum including an interactive book reading program, dialogic reading, at home and at school. In the dialogic reading program, 30 books were used, 1 per week, over the course of the school year. Each book was accompanied by a guide explaining the story or purpose of the book and giving tips on how to introduce and read it. A major goal of dialogic reading is to make the child an active participant in shared picture book reading; the goal is accomplished primarily through a questioning procedure by the adult reader. A second element of intervention involved a phonemic awareness curriculum termed sound foundations. Children were pre- and posttested on 21 standardized tests of language, writing, linguistic awareness, and print concepts. MANCOVA procedures indicated that the effects of the intervention were significant across all children in the domains of writing and print concepts. The linguistic awareness subtest involving the ability to identify the first letter and first sound of words gave significant effects. Other effects on language were large, but only for children whose primary caregivers had been actively involved in the at-home component of the program.

EDWARDS, PATRICIA A., & GARCIA, GEORGIA EARNEST. (1994). The implications of Vygotskian theory for the development of home-school programs: A focus on storybook reading. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches to language and literacy* (pp. 243–264). Cambridge, England: Cambridge University Press.

Reports on Parents and Partners in Reading, a program designed to assist nonmainstream parents develop the types of strategies needed to read with their children. Participants included 25 low-income mother-child dyads from a small, rural community in the southeastern United States. The book-reading program consisted of 23 2-hour sessions divided into 3 phases: coaching, peer modeling, and parent-child interaction. Each phase lasted about 6 to 7 weeks, with children attending the last phase of the program only. During the coaching phase, parents met in a group with a university leader. Book reading behaviors were modeled, and

videotapes were available for viewing. The objective of the peer-modeling phase was to aid mothers in managing the book-reading sessions and strategies. In the parent-child interaction phase, the university leader offered suggestions as to what books to read and provided feedback, while mothers shared books with their children and implemented strategies learned in the previous 2 phases. All 3 phases were videotaped. At the end of each book-reading session, parents filled out a response sheet and a learning log. It is reported that parents came to understand the importance of supporting their children as they moved toward becoming readers. Parents increased their own awareness about reading and learned to use the structure of stories to help their own oral reading and to engage children in a dialogue through the use of comprehension strategies.

DUNN, LORAINE; BEACH, SARA ANN; & KONTOS, SUSAN. (1994, Fall/Winter). Quality of the literacy environment in day care and children's development. *Journal of Research in Childhood Education*, *9*, 24–34.

Seeks to describe the literacy environment in typical day care classrooms, to determine the relation between measures of the literacy environment and traditional measures of day care quality, and to explore the influence of the day care environment on children's cognitive and language development. The sample consisted of 30 classrooms in 24 licensed community day care centers in an 8-county region of a midwestern state in the United States. Of the 30 teachers, 43% were certified (elementary, early childhood, CDA credential). Children were selected randomly and included 34 females and 26 males with a mean age of 51.85 months. Center and teacher characteristics were sought through questionnaires and interviews. Global day care quality was obtained with the Early Childhood Environment Rating Scale; assessment of the quality of the literacy environment was done using the Observational Rating Scale for Language Development and Literacy Programs in Preschools. Children's language development was assessed with the verbal intelligence subscale of the Classroom Behavior Inventory, a teacher rating scale. Children's cognitive development was assessed with the Preschool Inventory–Revised Edition, an individually administered achievement test. Data were analyzed by computing correlations and by conducting hierarchical regression analyses. Findings revealed relatively impoverished environments in terms of literacy quality. Correlation and multiple regression analyses indicated that centers with higher ratings on traditional measures of quality also had higher quality literacy environments. In separate hierarchical regression analyses, controlling for variance due to family factors, both day care quality and the environment predicted a significant portion of the variance in children's language development but not in children's cognitive development.

V–4 Teaching reading—primary grades

NEUMAN, SUSAN B., & FISCHER, ROBYN. (1995, March). Task and participation structures in kindergartens using a holistic literacy teaching perspective. *The Elementary School Journal*, *95*, 325–337.

Examines task and talk structures in kindergarten classrooms in which teachers used a holistic approach to literacy instruction. Included were 20 half-day kindergarten classes from 10 schools in a large urban district. Classes comprised ethnically mixed, predominantly low-income children. Class size ranged from 28 to 33 with an aide, parent, or student teacher available in most classrooms. Data sources included teacher interviews, videotapes, field notations, and samples of student work. Integrated language instruction was videotaped during 2 full days of observation in each classroom. Average lesson time for integrated language instruction was 36.43 minutes with a range from 18 to 57 minutes. Across all classrooms, 388 literacy

tasks were observed. These were then analyzed on 5 dimensions: activity format, duration, cognitive complexity, organization, and participation structures. Fifteen activity formats were observed during integrated language instruction, with 4 activities constituting over 61% of the total time observed in classrooms: comprehension, reading to children, drawing pictures, and reading with children. Skill activities (letter names, phonemic awareness, sight word recognition, and spelling) were observed 17% of the time. Of the total 388 tasks, 30% were classified as memory tasks, 29% as procedural, 20% as comprehension, and 14% as creative. Over 79% of classroom instruction was delivered to the whole class, with much of that time involving pupils in recitation-like talk structures.

McIntyre, Ellen, & Freppon, Penny A. (1994, December). A comparison of children's development of alphabetic knowledge in a skill-based and a whole language classroom. *Research in the Teaching of English, 28*, 391–417.

Gives results of a 2-year naturalistic case study examining how 6 low-income children in 2 different instructional settings acquired alphabetic knowledge. Subjects were 3 children from each of 2 types of classrooms, skills-based and whole language; all were selected randomly from participants in 2 large-scale studies. Literacy knowledge was assessed at the beginning of kindergarten and at the end of first grade. Data gathered included twice weekly observational reports of the children who were matched in pairs on the basis of their pre- and postmeasures of literacy. Additional data came from field notes, audiotape recordings, probes of children, informal and formal interviews with teachers, and collecting of reading and writing texts and documents. All pupils exhibited a similar chronological acquisition pattern of alphabetic knowledge. Differences were not in how fast or how well children learned the alphabetic system, but in what they did with the new knowledge. Skills-based children exhibited their knowledge in situations decoding isolated words or individual words in basal sentences; whole language children used their alphabetic knowledge to read literature and to write on self-selected topics. Development of alphabetic knowledge was identified in 5 categories of behavior: sound sense, sound/symbol sense, experimentation with the alphabetic system for reading or writing, successful use of the alphabetic system with help, and successful use of the alphabetic information independently. In both instructional settings children moved from highly contextualized readings and writings to more differentiated behaviors where alphabetic knowledge was used.

Campbell, Robin, & Stott, Gillian. (1994, November). Children's experience of learning to read. *Reading, 28*, 8–13.

Investigates the teaching of reading in 4 English infant classrooms that used two different approaches to instruction. Two classes employed children's literature, and two used published series or reading schemes. Data were collected through 20 half-day observations over 4 terms with year 1 and year 2 children. Additional data were drawn from school documents and from interviews with teachers and children. To gain insight into children's perspectives on learning to read, the researchers shared books with children in the classroom, consulted their reading records, and observed the children as they read to their teachers and peers. Children in the classes that employed trade books often asked if they could read to the researcher, typically expected to read the whole book, and wanted to talk more about the story. Children in the reading schemes classrooms typically indicated how many pages they expected to read, deferred to their teacher for the selection, and seemed less inclined to talk about reading. A reading record traveled between home and school to collect commentary on the children's reading. Enthusiasm for reading appeared to be linked to positive parental support. In addition, the book itself seemed to influence perspective on reading, with children in the literature-based curriculum generally more enthusiastic about reading.

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DAHL, KARIN L., & FREPPON, PENNY A. (1995). A comparison of innercity children's interpretations of reading and writing instruction in the early grades in skills-based and whole language classrooms. *Reading Research Quarterly, 30,* 50–74.

Compares innercity learners' interpretations of beginning reading and writing instruction received in skills-based and whole language classrooms. Two ethnographic studies were conducted with children whose kindergarten and first grade experiences were both either exclusively skills based or whole language based. Data from each ethnography comprised field notes, transcripts of children's reading and writing episodes, pupil papers, as well as pre- and postwritten language measures. Children's application of phonic knowledge, response to literature, coping strategies during problem solving, and perceptions of themselves as readers were also evaluated. Various analyses revealed that children taught by either approach were similarly concerned with accuracy, although written narrative registers of whole language learners were significantly superior to learners in the skills-based group.

DIXON-KRAUSS, LISBETH A. (1995, March). Partner reading and writing : Peer social dialogue and the zone of proximal development. *Journal of Reading Behavior, 27,* 45–63.

Reports on an action research investigation of the zone of proximal development concept. Subjects were 24 first and second graders placed in a multiage classroom. The children ranged from preprimer to second grade level in reading. Prior to implementation of the 6-week project, the children were in a teacher-directed whole-class instructional setting organized around thematic units. During the project, daily partner reading and writing activities emphasizing self-selection, collaboration, pupil-centered discussions about books, and writing in dialogue journals with partners took place, with teacher intervention assistance occurring as needed. In addition to the dialogue journals, data from the study included pre- and postattitude surveys, videotapes, and observational notes on the children's miscues and fluency. Analysis of dialogue journals showed development in children's level of control of their ability to convey their thoughts through writing, the quality of the social interaction that could be seen in the written dialogues, as well as their ability to evaluate each other's writing. Observational notes showed that children made their greatest improvement in word recognition and the least improvement in fluency. However, analysis of pre- and postattitude surveys revealed that children felt more positive about being asked to read aloud at the culmination of the study. Children also showed improvement with regard to books they selected to read, choosing books that were more difficult to read.

COMMEYRAS, MICHELLE. (1994, November). Were Janell and Nessie in the same classroom? Children's questions as the first order of reality in storybook discussions. *Language Arts, 71,* 517–523.

Presents and follows the discussion of a group of second graders about a pupil-posed question. The author notes that teacher-generated questions tend to be egocentric, but inviting children to pose questions places the focus on the child's point of view.

MORGAN, KENNETH B. (1995, May). Creative phonics: A meaning-oriented reading program. *Intervention in School and Clinic, 30,* 287–291.

Reports the results of a program designed to present systematic, structured, multisensory phonics to second grade pupils reading significantly below grade level. Each phonics lesson was 45 minutes of a 75-minute reading program. At the end of 1 academic year, children were tested with the Diagnostic Assessments of Reading (DAR) and the WJPR-R. Data were reported for the seven lowest level readers who averaged 1 year's growth on the word recogni-

tion subtest and 1 1/2 year's growth on the DAR. Three of the group tested on grade level on the passage comprehension subtest of the DAR. Components of the phonics lessons are described.

UNSWORTH, LEN, & LOCKHART, ALISON. (1994, August). Literacy and learning in science: What's happening in the junior primary school? *The Australian Journal of Language and Literacy, 17*, 212–226.

Reports an exploratory study of the use of written language in teaching physical science concepts in two year 2 classrooms in inner city schools of Sydney, Australia, to determine (1) the proportion of teaching time involved in reading and writing, (2) the kinds of texts that were read and written, (3) the degree of involvement of children and their teacher in the reading and writing, and (4) the type of instruction provided for reading and writing tasks. Consecutive lessons, 11 at one school and 17 at the other, of approximately 50 minutes each, were observed, field notes were taken, and writing samples were analyzed. Reading and writing episodes were identified; texts were classified as narrative or factual; and texts were sorted into lists, extended texts, and diagrams. Duration of episodes was expressed as a proportion of the total science teaching time during the study. Thematic responsibility, whether teacher or children had productive control over the language of the science episodes, was determined for each reading and writing episode. Reading and writing episodes varied from 12% to 27% of class time. Factual, extended texts were the most frequently used materials, and most reading was from published texts or teacher-produced worksheets. Most writings were procedural recounts of experiments the children performed. Little time was spent on instruction on how to read the materials, but more time was spent on task orientation for writing. Thematic responsibility was more balanced at one school than the other. Although the time spent in both classes was similar, the way materials were used and the type of instruction varied.

ROSS, STEVEN M., & SMITH, LANA J. (1994, November). Effects of the Success for All model on kindergarten through second-grade reading achievement, teachers' adjustment, and classroom-school climate at an inner-city school. *The Elementary School Journal, 95*, 121–138.

Evaluates the first-year influences of the Success for All (SFA) program on the reading achievement of pupils in grades kindergarten through second grade and examines the effects of program implementation on school climate and teachers. For assessing first and second grade outcomes, SFA pupils were matched to control pupils from a school in the same inner city neighborhood not involved in the SFA program. The two schools were nearly identical in the percentage of children receiving free lunch and in standardized achievement scores obtained during the previous 5 years. All first and second grade SFA pupils were matched to control pupils on the basis of their total language skills score and total reading score on the CAT. The final first and second grade samples included 44 and 45 subjects, respectively. Because no prior achievement test scores were available for use in matching kindergarten pupils, random samples of 22 children each were selected from the two participating schools. Due to attrition, final samples were of 20 and 22 subjects. The teacher sample consisted of all 10 kindergarten through second grade regular classroom teachers and the 2 tutors at the SFA school. Individual reading and language tests included three reading scales from the WRMT and two reading tests from the Durrell Analysis of Reading Difficulty. Eight reading and language subtest scores from the Tennessee Comprehensive Assessment Program were also analyzed. Three survey instruments were developed to assess teachers' reactions to various aspects of the SFA program. All SFA teachers were interviewed, and all teachers were observed for a full language arts period twice during the school year. Ethnographic methods were used to identify processes and achievements of the family support team. Results of the analysis of test data revealed significant advantages on 2 out of 3 tests (word identification and word at-

tack) at the kindergarten level. First grade SFA students in the lowest achieving 25% surpassed their control counterparts on silent reading tests but not on other tests. No differences were found for second graders, and there were no program effects on standardized achievement test scores. Teacher surveys, interviews, and classroom observations indicated that the implementation of the SFA program progressed smoothly and was highly accepted by the teachers. Program strengths identified by the teachers included cooperative learning, regrouping, tutoring, early reading instruction, writing, and active learning.

BARRON, BENNIE G., & TYREE, AMANDA. (1992, Summer). A comparison of basals and standardized test scores of successful third grade readers. *Education, 112*, 631–634.

Compares the performance of third grade readers on mastery tests from three basal reading programs and a standardized reading test. Participants were successful readers, identified using the mastery tests of their school's basal reading series and drawn from 9 classrooms in 3 central Louisiana school systems. Each school system used a different reading series, including the Houghton Mifflin Reading Program, Harper & Row's Design for Reading, and Economy's Keys to Reading. During a 2-week period, pupils were tested on the criterion-referenced mastery tests found in the 2 third grade basal series not used in their schools and on the GMRT, level C. The raw scores on all tests were converted to Z-scores and compared. Comparisons revealed no differences in achievement on basal mastery tests or on the GMRT. In addition, all readers were determined to be competent in reading skills required by the 3 basal series and to be competent in reading skills at the third grade level (GMRT).

NATHAN, RUTH. (1995, February). Parents, projects, and portfolios: 'Round and about community building in Room 14. *Language Arts, 72*, 82–87.

Describes one teacher's cornerstones for building a community of language learners in her classroom: the importance of knowing and involving parents, the value of projects that last for extended times, and the value of portfolios of self-selected work and student reflections. Examples of how these pivotal cornerstones provide the foundation for the classroom are presented.

WHAM, MARY ANN, & LENSKI, SUSAN DAVIS. (1994). Dialogue journals as a vehicle for preservice teachers to experience the writing process (I like him; should I tell him at recess?). *Reading Horizons, 35*(1), 62–70.

Describes a dialogue journal project undertaken between two university classes of preservice teachers ($n = 68$) and 87 first and second grade children. The project was designed to sensitize the education majors to the writing process, to the need for authentic audiences, and to the need for peer editing, as well as give opportunity to reflect, analyze, and respond to the written work of elementary children. Between 12 and 15 entries were exchanged between the child and preservice teacher during the semester. Preservice teachers used the entries to explore some developmental aspects of literacy being learned by their pen friend, such as the available evidence for the stages and changes in spelling development. Over time, children lengthened sentences in their entries and produced paragraphs. They sometimes replaced "safer" topics with one more personal or emotional. Results of questionnaires that served to evaluate the project indicated that 96% of the university students enjoyed the project and 97% considered it worthwhile. First graders overwhelmingly endorsed the journal activity, and second graders were positive but somewhat more reserved. Classroom teachers felt their students had experienced the natural relation of reading and writing in an unthreatening way.

SEPURA, BARBARA J. (1994). Read it again!: A study of young children and poetry. *Reading Horizons, 35*(2), 121–137.

Presents results of a year-long teacher-researcher's study of her 23 second graders' concepts and attitudes about poetry as a result of participation in a systematic poetry program. The children came from mixed socioeconomic backgrounds with reading levels ranging from kindergarten to high school. Eighteen had been exposed to poetry in first grade at an average rate of one poem per week. The previous poetry experience of the other 5 was unknown. Using shared reading procedures, the poetry program presented one poem daily, written on chart paper. Each of the poems reflected ongoing curricular units. Poems were posted and revised and reread by individuals as they wished. An attitude survey was administered during the first week of school and again at the end of the school year. A poetry concepts questionnaire was also administered. Observational data were collected weekly. Analysis of the pre- and postattitude surveys indicated that, with some variation on individual items, composite scores remained the same. The concepts questionnaire showed positive growth over the year on most of the items. Notably, more children were able to recognize poems by rhyming sounds and visual formats, and more were able to name a poem and a poet. Inspection of the observational data, however, provided numerous indicators that attitudes as well as poetry concepts had been observably altered across the year. Children wrote, copied, compiled, and reread their own poetry and that of others, including their classmates' poems. In addition, they requested poetry and had favorite poetry collections.

V–5 Teaching reading—grades 4 to 8

RAPHAEL, TAFFY E., & MCMAHON, SUSAN I. (1994). Book club: An alternative framework for reading instruction. *The Reading Teacher, 48*, 102–116.

Describes the evolution of the book club concept as a collaboration between university- and school-based researchers and an attempt to understand the difficulties in moving to a literature-based instructional model of reading instruction. The project was developed to enhance children's ability to discuss books and was based on the premise that pupils' interest in reading and ownership of ideas developed through reading would increase. Findings with the use of the book club program are compared with results from classrooms using a more traditional approach. In previous studies by the authors and other researchers, it was found that children in the book club program developed over time in their ability to (1) synthesize information, (2) weave conversations around important themes, (3) use a range of ways to represent their ideas in writing, and (4) take different perspectives. Children in the book club classrooms scored as well on standardized instruments as children in more traditional reading programs where tested skills were directly taught. Book club children interviewed in the fall following their first year in the program remembered and were able to discuss at least 9 of the 16 books read the previous year. Pupils in the commercial-based textbook program were unable to recall such information. Vignettes from early and later book club discussions in two classrooms are provided to demonstrate the evolution of thinking and to show shifts in the quality of the discussion over time.

WOLLMAN-BONILLA, JULIE E. (1994, October). Why don't they "just speak?" Attempting literature discussion with more and less able readers. *Research in the Teaching of English, 28*, 231–258.

Analyzes two literature discussion groups over the course of the school year to investigate the pupils' purposes for discussion and the kinds of discussion taking place. Discussants were sixth graders placed into the two groups on the basis of informal reading inventory scores. Groups met four or five times a week for 15 to 20 minutes to discuss an assigned novel. Data included audiotapes and transcripts of discussions, field notes describing the dis-

cussion and other classroom interactions, and interviews with the pupils and their teacher. Interviews used open-ended questions about perspectives on literacy at home and at school and asked participants' views on the literature discussion groups. Able readers participated eagerly and valued one another's contributions to discussion. Most found reading pleasurable and had parents who read for pleasure at home. All believed in their own competence and in the competence of the group and the group's ability to help one another with text understandings. Less able readers required more teacher direction and volunteered less often. Most reported finding reading boring and considered themselves and their group members to be unsuccessful readers. Less able readers felt that the purpose of the group was evaluation and that the teacher's role was to transmit knowledge and evaluate their progress. Groups differed in their turn taking, the length of their turns, their initiation of topics, their ability to sustain an initiated topic, and their degree of elaboration of the topics. With less able readers, the teacher felt the need to take a directive role and focus on helping pupils articulate literal comprehension. The less able readers did not experience the sharing of ideas and the opportunity to develop a richer appreciation of literature.

ENCISO, PATRICIA E. (1994, November). Cultural identity and response to literature: Running lessons from *Maniac Magee*. *Language Arts*, *71*, 524–533.

Uses a children's story with four and fifth graders and presents excerpts from the ensuing discussions to demonstrate the use of literature in helping children understand their own and others' cultural and social identities. The author met with 16 multiracial, predominantly low-income children who were divided into 2 groups. Each group met 2 to 3 days a week for 1 1/2 hours over a 4-week period. The story under discussion addressed identity and racial conflict. The author focuses on 3 of the children and the manner in which they expressed their own identities in the context of the discussions. Excerpts from the discussions are presented along with the author's interpretations.

JONES, H. JON; COOMBS, WILLIAM T.; & MCKINNEY, C. WARREN. (1994, Winter). A themed literature unit versus a textbook: A comparison of the effects on content acquisition and attitudes in elementary social studies. *Reading Research and Instruction*, *34*, 85–96.

Investigates whether trade books for children can be used to convey the information of an elementary social studies class more effectively than a social studies content area textbook. In addition, the investigators sought to determine whether use of children's trade books improves student attitude in some way. The sample for the study consisted of 45 sixth graders in two classrooms. Each class participated as an intact group and was randomly assigned to treatments. One class received instruction in a unit on Mexico by means of the school-adopted textbook and according to the recommended procedures of the teacher's manual. The second group was taught using children's books that addressed the same topic by means of a themed literature unit. A 32-item pretest and posttest measured achievement and included a 5-item attitudinal survey. ANCOVA with pretest scores covaried indicated that the group taught with the children's books in the themed literature unit showed a significant gain in achievement compared with the group taught with the textbook. Further, the group that used trade books indicated a positive attitude toward the experience.

GASKINS, IRENE W.; GUTHRIE, JOHN T.; SATLOW, ERIC; OSTERTAG, JOYCE; SIX, LINDA; BYRNE, JANICE; & CONNOR, BETH. (1994, November). Integrating instruction of science, reading and writing: Goals, teacher development, and assessment. *Journal of Research in Science Teaching*, *31*, 1039–1056.

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Reports (1) the development and implementation of a year-long, middle school curriculum implementing conceptual and process outcomes in science, reading, and writing for 50 children who were reading below grade level at a private school in the United States; (2) an 8-day performance assessment that was developed to ascertain student awareness and control over concepts and processes taught in a specific unit; and (3) information from interviews with the teachers and supervisors about the curriculum development, their teaching, and their professional growth. Findings suggest that children grew significantly in areas targeted for study: their ability to state the components of a problem, to select appropriate reading materials, to express science principles in written form, and to apply what they learned. Little gain was determined in making illustrations of problem solutions and in explaining problem solutions. Interviews suggested that the performance assessment accomplished the goals established and served as a prototype for planning and evaluating lessons and discussing pupil progress.

BRISTOR, VALERIE J. (1994). Combining reading and writing with science to enhance content area achievement and attitudes. *Reading Horizons*, *35*(1), 30–43.

Reports findings from a 5-year research project to study the effects of an integrated curriculum strategy on the achievement, attitudes, and self-confidence of fourth and fifth graders. The experimental science/reading groups received in-depth instruction in science and reading, including numerous opportunities for hands-on science, writing, and discussion of ideas and concepts. Teachers guided students in directed reading in the content area related specifically to the science concepts being learned. Teachers also used trade books and other print technology materials to access and augment students' background experiences to enhance their comprehension of the science text. Control groups received regular basal and science instruction separately. Comparison groups were selected with demographics matching those of the experimental groups. Across the 4 years for which data have been analyzed, children of varying abilities who received science/reading instruction obtained statistically significant greater levels of achievement in both areas. In addition, the science/reading students displayed significantly more positive attitudes and greater self-confidence.

CARVER, RONALD P., & LIEBERT, ROBERT E. (1995). The effect of reading library books at different levels of difficulty upon gain in reading ability. *Reading Research Quarterly*, *30*, 26–48.

Asks if controlling the difficulty level of library books provided for reading enhances gain in reading achievement. Participants were 43 third to fifth grade students enrolled in a 6-week summer reading program. Students at each grade level were randomly assigned to 1 of 2 difficulty level groups: matched rauding and easy rauding. Matched rauding students were allowed to choose books to read at their reading level or slightly above, while easy rauding students were allowed to choose books at their reading level or below. Pre- to posttest gain scores on the Accuracy Level Test and the Rate Level Test for both rauding groups were approximately equal, showing a very small effect size (.03). Follow-up analyses of the books revealed there was no difference between the measured readability levels of the books read by the 2 groups. Since both groups were noted to have read easily readable books, the authors could offer no support for the notion that easy rauding promotes reading achievement.

CARROLL, JACQUELIN H., & CHRISTENSON, CHARLENE NOELANI-KAHUANUI. (1995, January). Teaching and learning about student goal setting in a fifth-grade classroom. *Language Arts*, *72*, 42–49.

Explores the growth and development of 18 fifth graders attending a private school for Hawaiian children. Pupils were given a role in establishing their learning goals and in self-evaluation. At the beginning of the school year, many pupils' goals for reading and writing

focused on surface features rather than on improving the content or organization of writing pieces or on the need to understand and find personal meaning in what was read. Interviews with children in the spring indicated that over 80% of pupils felt good about the goal-setting process. Setting goals aided children to focus on and apply strategies and skills. The process also aided pupils by connecting newly learned strategies and skills to their needs as readers and writers.

HANDEL, RUTH D. (1995). Family reading at the middle school. *Journal of Reading, 38*, 528–540.

Highlights the first phase of a family literacy program for one middle school in Newark, New Jersey, describing (1) the adaptation of the program from other programs conducted with families of preschool and elementary children; (2) the necessary staff development for the teachers at the middle school; (3) the operations of the program in the classrooms of the middle school students as well as in the elementary school and the home as the seventh graders become reading helpers to younger children; and (4) the preliminary results of the program's effectiveness. Data sources reported include observations of the middle school students as they worked with the kindergarten or first grade children at the elementary school, teacher reports about changes in students, and written answers to questions, and self-reflections from the middle school students involved. Initial findings indicated that the middle school children developed close relationships with their tutees, recognized their special role, and became aware of reading strategies.

LEONG, CHE KAN. (1995, Spring). Effects of on-line reading and simultaneous DECtalk auding in helping below-average and poor readers comprehend and summarize text. *Learning Disabilities Quarterly, 18*, 101–116.

Reports two studies designed to investigate the role of on-line reading and simultaneous DECtalk auding on pupils' comprehension of expository prose. The sample for study 1 included 64 fourth graders, 68 fifth graders, and 60 sixth graders selected from a midwestern Canadian city. The Canadian Tests of Basic Skills were administered to identify above- and below-average readers at each grade level. Other assessments administered to all subjects were the British Ability Scales, the WRAT-R, the Index of Reading Awareness, and the Working Memory Span Test. Subjects were randomly assigned to one of four experimental conditions: (1) on-line reading and DECtalk auding, (2) on-line reading and DECtalk auding plus explanations of difficult words in both modes, (3) on-line reading and DECtalk auding plus explanations of difficult words in both modes plus metacognitive activities, and (4) on-line reading and DECtalk auding of simplified passages. Four expository passages determined to be written at a mid–to upper–sixth grade level were presented in two rewritten forms, one modified to ensure cohesion and the other simplified to lower the readability to a low–sixth grade level. All subjects read all passages. Reading comprehension was assessed from verbal answers to inferential questions and verbal summaries of the passages. ANCOVAS, using general ability, metacognition, and working memory span scores as covariates, showed significant differences in grades, reading levels, and modes of responses to the passages (answers or summaries), but not for experimental condition. Study 2 replicated study 1 with 12 poor readers (sixth grade pupils reading on a fourth grade level), 12 CA controls from the same classrooms, and 12 RA controls from the fourth grade. Study procedures, pupils' assessments, and data analyses remained constant. Results were the same as those observed in study 1.

PHILLIPS, JERRY. (1994). Changing expressions and perspectives: Reluctant writers write. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies:*

Eleventh yearbook (pp. 34–40). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Explores how seventh and eighth graders change their perspectives about writing during one writer's workshop. Twenty-one students from 7 public schools, 7 college students and 1 teacher attended 5 consecutive 1 hour Saturday morning writing sessions held at a southeastern U.S. university. Gifted and talented children were invited to attend based on recommendations of supervisors. Students had identified writing as an area in which they would like to improve. The workshop followed a typical interactive format including minilessons, thinking, sharing and drafting, multiple opportunities for responses to the works in progress, and publishing. Qualitative inductive process was used to analyze and triangulate 5 sets of personal field notes, 5 sets of taped, transcribed notes from college students, and 21 student journal reflections about writing. Many reluctant writers had negative thoughts about themselves as writers, and these were influenced by their prior knowledge and experience with writing. Students were more disposed to discover ways to apply writing knowledge in their life in a relaxed situation and came to understand that writing can make them feel better if they think it is good writing.

V–6 Teaching reading—high school

MOJE, ELIZABETH B., & HANDY, DOLORES. (1995). Using literacy to modify traditional assessments: Alternatives for teaching and assessing content understanding. *Journal of Reading*, *38*, 612–625.

Summarizes data collected from a year-long ethnography of literacy activities used for teaching and assessing students in a high school first year chemistry class. The class met for 2 hours daily and had 22 students, 8 females and 14 males. Students were assigned daily readings; were required to take notes summarizing their assigned texts, articles, and biographies; discussed their learnings; completed end-of-chapter exercises; and engaged in problem-solving sessions. Laboratory explorations were assessed at each stage of implementation, preparation, exploration, and conclusion. Teacher modeling was extensive. Daily activities were used as a means of gathering informal assessments, in addition to the multiple-choice, laboratory and writing assessment tasks created for the end of the semester and for the final exam. Examples of transcripts and activities are included.

DOLE, JANICE A.; SLOAN, CHRISTOPHER; & TRATHEN, WOODROW. (1995). Teaching vocabulary within the context of literature. *Journal of Reading*, *38*, 452–460.

Explores the effectiveness of establishing one strategy for identifying important vocabulary and for learning those words within the context of literature study. Subjects included all tenth grade students ($n = 43$) enrolled in an elective English course and included two homogeneous classes taught by the same teacher. One class was introduced to the alternative vocabulary study; the other class served as a control group and received traditional vocabulary instruction. The study was conducted over a 10-week period in three phrases focused on three novels. Procedures involved the experimental class in traditional, teacher-supported instruction that evolved into independent applications. Instruction focused on how to select important words relevant to a selection and how to learn those words. Pre- and posttests of vocabulary were administered to all students; comprehension tests were administered for each of three books read. Results of ANOVA testing revealed a significant interaction between instructional condition and vocabulary test scores. Post hoc analyses showed the alternative group significantly outperformed the traditional group on the vocabulary posttest. Evaluation of students' written definitions and contextual sentences indicated advantage for the alternative

group students. Analysis of reading comprehension tests, using ANOVA procedures, revealed a main effect for instruction. The alternative group scored significantly better on all three of the comprehension tests than did the traditional group.

BURROUGHS, ROBERT. (1993, Spring). Supporting successful literature programs: Lessons from a new national survey. *School Library Media Quarterly, 21*, 159–163.

Cites evidence from two national studies of high school literature programs conducted in 1989 by the National Research Center on Literature Teaching and Learning. The report presented focuses only on data relating to the role of the library media center. The first study surveyed 195 public schools, 63 achievement award schools, 42 schools identified as centers of excellence, 61 Catholic schools, and 48 independent schools. The second study presented a series of case studies examining 17 schools with local reputations for excellence in English instruction. In the latter, 2 observers spent 2 days observing classrooms, interviewing teachers, and distributing questionnaires to teachers, students, and library media centers. Factors differentiating schools with library media centers in award-winning English programs from other schools included a library media center with an adequate number of books, accessibility of books and participation in resource-sharing networks, availability of specific titles, and use of the center by teachers in drawing upon collections of literary criticism. More teachers in achievement award schools (70%) rated their libraries as excellent than did teachers in public schools (less than 50%). In the 17 case study schools, library media centers were among the special strengths noted by observers; library media centers in these schools had comprehensive collections.

ZIENTARSKI, DEBORAH PHELPS, & POTTORFF, DONALD D. (1994). Reading aloud to low achieving secondary students. *Reading Horizons, 35*(1), 44–51.

Describes a read-aloud project with 31 secondary students who registered low reading performance scores on the Kaufman Test of Educational Achievement. The teacher's selections for reading aloud initially were drawn from the real-life dramas of *Reader's Digest*. Over time, the students were read lengthier novels and myths. Goals for the project included motivating reading, developing appreciation, encouraging critical thinking, building background knowledge and cultural literacy, and developing vocabulary strategies. Early results indicate that students are participating with literature, experiencing opportunities to think in response to text, seeing thinking modeled, and expanding their vocabularies and background knowledge.

NEWELL, GEORGE E., & WINOGRAD, PETER. (1995, May). Writing about and learning from history texts: The effects of task and academic ability. *Research in the Teaching of English, 29*, 133–163.

Examines the effects of 3 study conditions (review only, study questions, and analytic essay writing) on high school students' writing and learning from text (concept application, immediate recall, delayed recall, and recall of manipulated content). An experienced social studies teacher and 2 levels (general and academic) of her 11th grade U.S. history course participated in the research. Observational and case study techniques were employed to describe the teacher's pedagogy, and then a volunteer group of 22 students (15 from the academic class and 7 from the general) read, reviewed, or wrote about their reading and were tested on learning from selected history passages. Analyses of the students' writing indicated their varying approaches to studying and writing about the passages. Both forms of writing (analytic and study questions) enabled both groups to perform better on all learning measures, with the academic students consistently outperforming the general students. Analytic writing was associated with higher scores on concept application, and study questions led to better general recall in the immediate and delayed conditions. When recall was further analyzed for the number of content units contained in the written responses to the two writing tasks, more

content units appeared in the analytic writing in both the immediate and delayed conditions. Although the general students' performances on the posttest measure were not as strong as the academic students' performances, they benefited more from analytic writing than from answering study questions about the history passages. Because both instructional context and academic ability seem to influence students' performances on writing-to-learn tasks, the authors suggest the need for research to disentangle these influences to identify the effects of pedagogy and student ability on learning from writing.

LINGARD, TONY. (1994, December). The acquisition of literacy in secondary education. *British Journal of Special Education*, *21*, 180–191.

Reports the effectiveness of an experimental literacy curriculum designed to provide daily, individual and small group assistance for secondary students with special needs. Two separate samples were studied. One group consisted of low attainers in literacy from 3 comprehensive English schools who were followed for 2 consecutive periods of 30 weeks over the first 2 years of secondary schooling. The second sample consisted of low attainers in literacy who began their secondary schooling 1 year after those in the first sample. In one sample, students spent the first teaching period in a mainstreamed mixed-ability class and the second teaching period in experimental groups; in the second sample, order was reversed. Students in experimental groups followed an individualized reading program using self-selected books, taped books, phonics, and spelling lessons; additionally, they produced a weekly piece of writing and had a high level of parent support and involvement. Individual teaching was provided wherever possible. Subjects in control classes used thematic instruction, wrote in response to their reading, had intermittent spelling instruction, and received little in-class support. Students in the experimental groups made significantly greater progress in reading and spelling on the Suffolk Reading Scale and the Vernon Graded Word Spelling Test than did students in control groups, leading the researcher to conclude that separate rather than mainstreamed classes provide more opportunities for low attainers to learn.

CAIRNEY, TREVOR H. (1995). Developing parent partnerships in secondary literacy learning. *Journal of Reading*, *38*, 520–526.

Reports the development and implementation of Effective Partners in Secondary Literacy Learning (EPISLL), a program in Australia designed to support and raise parent participation in children's literacy learning and study skills in grades 7 to 10. The program grew out of parent requests and was initially implemented with 17 adults and their 57 children, aged 12 to 17 years. The objectives of the program were to increase community awareness of literacy learning and its importance for schooling and entry into society; to develop more positive attitudes toward reading and writing in the school and community; to encourage members of the school and community to see reading and writing as relevant activities; to develop and maintain a program that could have widespread use; to encourage teachers, parents, and students to work together; and to increase parent involvement in school so that parents and teachers understood the reciprocal nature of their relationships. The program consisted of 11 2-hour sessions over a 6-week period. Content included goal setting, nature of reading and writing, strategies to assist students, organizing time, locating and using community resources, and computer technology. Early analysis of data indicated that the initial objectives were met. Parents evaluated the program with a written questionnaire, and data were collected through personal interviews. Results indicated that the program helped parents with strategies, provided knowledge about literacy and learning, facilitated better relationships with their children, and increased their own growth and confidence. The program seemed to bring about better relations between home and school. Initial analysis suggests that students acquired new skills, raised their expectations, and gained in confidence and self-esteem. Parents and students both reported better relationships as a result of participating.

V–7 Teaching reading—college and adult

COMMANDER, NANNETTE EVANS, & SMITH, BRENDA D. (1995). Developing adjunct reading and learning courses that work. *Journal of Reading, 38*, 352–360.

Presents information about the development and implementation of adjunct reading and learning strategies courses paired with content specialty courses at one university. Participants in the adjunct course were high risk, conditionally admitted students who were required to take a course in reading. Course grades of students in adjunct classes were compared with grades of students in all sections of a history course. The number of students passing with a grade of C or better was also determined. While three fourths of the adjunct students passed the course with a C or higher, grade average (1.5 on a 4.0) scale) was lower than for the other history students (2.3). Data from the first pilot led to content and procedural changes in the second pilot. Average grade for adjunct course members in the second pilot rose to 2.3 and for all students the average was 2.5. When freshmen only were considered, adjunct students scored higher than freshman students enrolled in all sections. Suggestions for designing adjunct courses, based on these two pilots, are included.

APPLEGATE, MARY DEKONTY; QUINN, KATHLEEN BENSON; & APPLEGATE, ANTHONY J. (1994). Using metacognitive strategies to enhance achievement for at-risk liberal arts college students. *Journal of Reading, 38*, 32–40.

Summarizes the characteristics of integrated approaches to teaching reading that are necessary for at-risk college readers as they work with advanced academic materials. Two case studies documenting implementation of these integrated approaches are presented, one of a strong student and one of a student with many reading difficulties. Approaches taught included variations of KWL, SQ4R, and schema mapping. Data from the case study suggest that the students grew more confident in their ability to assess their knowledge base and in their ability to monitor their own learning.

NIST, SHERRIE L., & SIMPSON, MICHELE L. (1994). Why strategies fail: Students' and researchers' perceptions. In Charles K. Kinzer and Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 287–295). Chicago, IL: National Reading Conference.

Seeks to describe strategy failure from the perspective of the student and compares those to explanations of strategy failure offered by researchers. Eighty randomly selected undergraduates enrolled in a learning strategy course were administered the Strategy Perception Instrument during their sixth week of formal strategy instruction. Using content analysis and comparing results from parts 1 and 2 of the instrument, 4 categories emerged as reasons for study strategy failure: follow-through; time; lack of correct strategy construction; and lack of match between strategy and the test/task, the subject, or the person. Twenty-six existing studies focusing on specific learning strategies were examined for comparative purposes. All studies were experimental and conducted with postsecondary students. The greatest proportion of responses for strategy failure fell into the lack of match category. Closely following the match category is that of follow-through. Overall, the results suggest that there is some overlap among general categories that students and researchers cite for study strategies failure. However, within the categories, the specific reasons for this failure differ between the two groups. Motivation as it related to study strategy use has been ignored by both students and researchers as a viable explanation of strategy failure.

MINNIS, MICHELE. (1994). Toward a definition of law school readiness. In Vera John-Steiner, Carolyn P. Panofsky, & Larry W. Smith (Eds.), *Sociocultural approaches*

to language and literacy: An interactionist perspective (pp. 347–390). Cambridge, England: Cambridge University Press.

Analyzes the skills and underlying cognitive and linguistic behavior required in four specialized literacy tasks introduced in the first semester of law school. The four tasks include (1) read and brief judicial opinions, (2) analyze judicial opinions orally, (3) analyze hypothetical fact patterns in legal memoranda, and (4) analyze hypothetical fact patterns in law school examinations. Coaching by professors is limited to task 2. Students are expected to rely on previous learning, general prescriptions, indirect feedback, and ingenuity in adapting to new situations and techniques practiced in class. It is argued that law school education is designed for good students who understand what the instructors mean but do not explicitly state in classes. A concluding section of the chapter is focused on the educational implications for minority students who often do not begin law school practiced in the skills needed to succeed there.

VAN, BRINDA. (1992, Spring). College learning assistance programs: Ingredients for success. *Journal of College Reading and Learning, 24*, 27–39.

Reviews the literature, including research, in the areas of developmental education, student development, and college retention in order to identify variables associated with successful college learning assistance programs. Nine variables were identified as associated with effective practices in such programs. The literature undergirding each variable is briefly presented.

CHERNEY, ELAINE. (1994). Postsecondary education for learning disabled students: A review of ERIC document trends. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies: Eleventh yearbook* (pp. 82–89). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Reports on trends identified through a review of ERIC documents on postsecondary education for learning disabled students. Articles and documents available through ERIC (1981–1987) fell into the following categories: development of programs, teaching and learning, personnel and administration, and transition from high school to college.

BARTEL, BEVERLY. (1993–94). What research has to say about instruction in text-marking strategies. *Forum for Reading, 24*, 11–19.

Overviews research on instruction of strategies frequently taught in college level study skills courses and underscores the importance of students grasping meaning inferences beyond the sentence level. Suggests strategies to increase retention of text information including writing summaries in the margins and more attention to text structure.

V–8 Instructional materials

DEMETRULIAS, DIANA MAYER. (1992, Spring). Developing intellectual creativity through children's literature for preschoolers through third grade. *Education, 112*, 464–469.

Examines and analyzes the content of books suitable for preschool through primary grade aged children and 50 children's books that have received the Caldecott Medal Award since 1938. The books were analyzed using 8 criteria in terms of the explicit depiction of intellectual creativity in their content. The criteria are given along with the book or books that represent each criterion. The content of 8 of the Caldecott Medal Award books demonstrated

one or more of the various elements of creativity. Also included is a recommended bibliography of children's books that illustrate various aspects of creativity and creative thinking skills.

GUZZETTI, BARBARA J.; HYND, CYNTHIA R.; SKEELS, STEPHANIE A.; & WILLIAMS, WAYNE O. (1995). Improving physics texts: Students speak out. *Journal of Reading, 38*, 656–663.

Presents data from questionnaires and interviews with students enrolled in high school science classes. The 45 students were asked to express views about science, their science texts, how they learned and studied science materials, and whether they preferred text that presented common misconceptions and told why they were wrong (refutational text) in addition to giving the correct information, or if they preferred text that presented correct information only. Subjects were enrolled in physical world, physics, and honors physics classes and represented different ability levels as well as different cultural groups, including students of different nationalities. In addition to answering questions, students read two texts, one narrative refutational and one expository refutational, and were asked to comment on points of interest as well as to demonstrate their understanding of the scientific concepts. Analyses of the interviews and the questionnaires suggested that students preferred refutational text to nonrefutational text as they thought more information was presented. Although they thought the narrative text was more interesting, they preferred the expository text for learning physical concepts. Students suggested specific ways texts could be revised to promote learning. They also suggested alternative formats for text presentation that would make information more readily accessible.

BRAL, CONNA. (1995, March). Textbook format and comprehension. *Iowa Reading Journal, 7*, 2–3.

Presents results of an inspection of 6 pages from a randomly selected chapter in each of 3 math textbooks to determine the frequency of strategy cues (or adjunct aids) that could serve comprehension. Texts from grades 5, 9, and college levels were chosen for analysis. The author noted that the texts differed widely in their inclusion of strategy cues. Besides use of color (within the fifth and ninth grade texts), the most frequently occurring cues were uses of boldface and of titles and headings. None of the text samples included objectives, familiar quotes or stories, rhetorical questions, schematics, paraphrasing, suggestions for further readings, margin notes, or outlines. Only the college text offered a preview or overview.

NAKATA, MARTIN, & MUSPRATT, SANDY. (1994, August). How to read across the curriculum: The case of a social studies "Social Investigation Strategy" as ideological practice. *The Australian Journal Of Language and Literacy, 17*, 227–239.

Studies the forms and principles in one social education curriculum used in Queensland, Australia, in year 5 to determine how the "Social Investigation Strategy" recommended in the curriculum directs and shapes classroom lessons. The researchers conclude that the document is tied to particular theories of pedagogy and social practice, which affect how children make sense of the patterns of interaction among people, social institutions, and their cultural and natural environments, and that the Western perspectives used as organizing devices for the study will be problematic for classes involving Aboriginal children.

MCLAUGHLIN, MARGARET A. (1994). The effects of whole language instruction on academically underprepared college students. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies: Eleventh yearbook* (pp. 13–33). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Tests the effectiveness of Facts, Artifacts, Counterfacts (FAC), a whole language approach to remedial education for college students. From those students required to take remedial reading and English classes, 30 subjects were stratified on SAT verbal scores and randomly selected for the FAC program; others ($n = 632$) were assigned to regular control classes. The experimental FAC class was team taught by experienced instructors and met for 2 hours a day, 5 days a week for 10 weeks. Students read and responded to novels through discussing, writing, meeting in conferences, and constructing personal essays. Significant increases ($p < .001$) were found in the posttest scores of the FAC class on the Reading and English Collegiate Placement Exams (CPE), and the Test of Writing and Reading. Course-exit percentage rates were significant for reading CPE ($p < .10$) in favor of the FAC class. One year later more students from the FAC course successfully completed Freshman Composition I than those in the control group (53%, 29%, respectively) and returned to school (83%, 66%, respectively). No differences were found for the 2 groups on GPAS 2 years later.

STAHL, NORMAN A.; HENK, WILLIAM A.; & BROZO, WILLIAM G. (1994). Evaluative criteria for college reading-study research–revisited. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies: Eleventh yearbook* (pp. 2–12). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Reviews qualitative studies of instruction in applied educational settings during the last decade. The authors state that much instruction occurring in college reading and learning programs is based on either long standing, conventional wisdom or questionable research studies. Evaluative criteria that include attention to methodology and data analysis are proposed.

V–9 Teaching—grouping/school organization

ROSS, STEVEN M.; SMITH, LANA J.; LOHR, LINDA; & MCNELIS, MARY. (1994, November). Math and reading instruction in tracked first-grade classes. *The Elementary School Journal*, 95, 105–119.

Examines the tracking system in a large urban school system to determine how classroom conditions, resources, and teaching methods compared in 20 remedial and 20 regular tracked first grade classes. The 40 classes were chosen by randomly selecting 20 schools from the school system that had at least one remedial class and one regular class. Where multiple classes within either category existed at one school, one class was randomly selected from all available. A total of 160 1-hour observations were made using the following design: 20 schools × 2 tracks × 2 subjects (reading and math) × 2 visits (per subject, for each teacher). In addition, a 61-item survey was administered to the 40 teachers to secure information about their backgrounds, attitudes, and practices. The instrument employed for recording observations, the Elementary Classroom Observation Measure, was developed for this study. Statistical and descriptive comparisons were completed. Two-way chi-square tests of independence were used on nominal measures; two-way (visit × class type) MANOVAS were performed on each category of observation-interval measure. The visit variable (fall vs. spring) was a repeated-measures factor. Findings revealed few substantive differences between the remedial and regular first grade classes in classroom structure and environment, instructional methods, teacher attitudes, teacher effectiveness, or instructional time usage. Teaching methods (direct instruction, cooperative learning) and activities did vary across math and reading classes. Reading teachers were more likely than math teachers to use teacher-led group activities, independent work, center-based activities, and instructional resources such as textbooks, storybooks, and visual materials.

TELFER, RICHARD J.; JENNINGS, ROBERT E.; MOTTLEY, REED; & MCNINCH, GEORGE. (1994). Students' perceptions of high school stratification and opportunities. In Bernard L. Hayes & Kay Camperell (Eds.), *Reading: Putting the pieces together* (pp. 115–132). Athens, GA: American Reading Forum.

Looks at the perceptions of high school students about the relation between perceived intelligence-based group membership and available literacy opportunities, expectations, and requirements including exposure to cooperative work, problem-solving skills, and shared decision making. Subjects were 198 high school students (sophomores, juniors, seniors) from each of four states. A 28-item questionnaire was developed to measure students' perceptions of formal and informal ability grouping in their schools and the extent of students' experiences working cooperatively, solving problems, and sharing decision making. Questionnaires were administered by classroom teachers to students in required social studies or English classes. Results indicate the existence of academic stratification seems to be generally accepted. Students in different groups appear to be subject to different expectations and treatment. Experience in small group cooperative decision making and problem solving is not likely to be a significant part of students' high school experiences, especially when considering problem solving outside the area of math.

ROSENSHINE, BARAK, & MEISTER, CARLA. (1994, Winter). Reciprocal teaching: A review of the research. *Review of Educational Research, 64*, 479–530.

Reviews 16 studies of reciprocal teaching, including published studies found in journal articles and unpublished studies indexed in *Dissertation Abstracts International*. To be included in the review, studies had to be quantitative in methodology, use the words "reciprocal teaching" explicitly, reference the works of Palincsar and Brown who first described the instructional approach, and contain both experimental and control groups with random subject assignment to treatment. In 12 of the 16 studies, students were taught the same 4 comprehension-fostering strategies as Palincsar and Brown used (generating questions, summarizing, attempting to clarify word meanings or confusing text, and predicting what might appear in the next paragraph). Analysis of the studies indicated that when standardized tests were used to assess comprehension, the median effect size, favoring reciprocal teaching, was .32. When experimenter-developed comprehension tests were used, the median effect size was .88. The reviewers discuss the role of cognitive strategies in enhancing comprehension, the strategies that were most helpful, the instructional approaches for teaching cognitive strategies, the quality of the dialogue during reciprocal teaching, and suggestions for future research and practice.

MACGILLIVRAY, LAURIE, & HAWES, SHIRL. (1994). "I don't know what I'm doing—they all start with B"; First graders negotiate peer reading interactions. *The Reading Teacher, 48*, 210–217.

Observes the ways first grade pupils negotiated partner reading and describes the roles the pupils assumed to determine who was in charge and how the reading would be carried out. The study was conducted in one first grade classroom consisting of ethnically diverse pupils. Data collection included field notes recorded during classroom observations conducted 4 mornings a week during the 3-hour reading-writing block, audiotaped interviews with parents and children, and pupils' drawing and writing samples collected weekly. Pupils' role sets—the frames of negotiation that were used as two children came together to share a book—emerged from repeated readings of the field notes and interviews by the researchers. Further refinement of their conclusions resulted from sharing the findings with the first graders at the end of the study. Four types of role sets, or negotiation frameworks, were identified and were labeled: coworkers, fellow artists, teacher/student, and boss/employee. Three issues

were reported integral to the interactions. First, children had a sense of their own competence and that of their partners. Second, the pupils' concerns, such as the desire to behave appropriately by school expectations, affected the reading events. Third, pupils' claims, based on their sense of their own competence and concerns, also guided the interactions.

STEVENS, ROBERT J., & SLAVIN, ROBERT E. (1995, January). Effects of a cooperative learning approach in reading and writing on academically handicapped and nonhandicapped students. *Elementary School Journal, 95*, 241–262.

Studies the effects of a comprehensive cooperative learning approach to elementary reading and language arts instruction on pupils' achievement, attitudes, and metacognitive awareness over 2 years. In the Cooperative Integrated Reading and Composition (CIRC) program, children in second through sixth grade worked in heterogeneous learning teams on reading and writing activities related to stories they were reading. Teachers provided pupils with explicit instruction on comprehension strategies and used a writing process approach to teach writing and language arts. The study also mainstreamed academically handicapped pupils in regular classes, and these children were active participants in the cooperative learning team activities. In the study, 635 children at 3 elementary schools using the CIRC program were compared with 664 children at 4 matched schools that used traditional instruction. The 72 academically handicapped mainstreamed pupils at the CIRC schools were compared with 65 control pupils in pull-out programs. The first year results showed that CIRC pupils had significantly higher achievement in reading vocabulary and comprehension. Second-year results indicated that the CIRC group had significantly higher achievement in vocabulary, comprehension, and language expression. The CIRC pupils also exhibited greater metacognitive awareness than did their peers. Academically handicapped children who were mainstreamed in CIRC classes had significantly higher achievement in reading vocabulary, comprehension, and language expression than did comparable pupils taught in traditional settings. There were no significant effects on pupils' attitudes toward reading and writing.

WARD, ANGELA. (1994). Teaching young children to work together in cross-cultural settings. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 55–59). Cheshire, England: United Kingdom Reading Association.

Presents a project designed to reduce the incidence of noncooperative behavior between young Canadian Native Indian children and give them practice in using literary language. Twenty-four children, ages 6 to 9, most of whom were Native Indian, made up the inner-city classroom in western Canada. The university researcher became a participant observer in the classroom 1 morning a week, where she assumed the role of teaching assistant. Using a series of cooperative learning activities based on response to literature, children received direct instruction in and modeling of explicit rules for working together and for talking about books. At the end of the school year, child-partner interactions were recorded for 10 activities and transcribed in order to categorize the children's talk. By the end of the year, over half of the children still had difficulty during transition times and complained about teacher-assigned partners. Negotiation of turn taking between boy-girl partnerships rarely occurred; boys spoke most often, set the topic, and took the longest turn. Negotiation between same sex pairs was more evident. Overall, children did share materials and used language to help them do so. Much of the literary language recorded was operational talk or language needed to accomplish the activity.

BERGERON, BETTE S., & RUDENGA, ELIZABETH A. (1995, Spring). Inclusion and literacy: Shared effects. *Illinois Reading Council Journal, 23*, 23–35.

Explores implications of inclusion for literacy learning in two diverse midwestern elementary school settings as reflected by the perceptions of teachers directly involved with in-

clusion programs. Although both of the school sites stressed academic excellence and innovation, they moved toward inclusion differently and in ways that affected both teachers' professional choices and children's literacy learning opportunities. Implementation of inclusion in the first school stemmed from a parent request that was followed up by a principal and faculty search for information, by limited piloting, and by an evolving policy that included case reviews of all possible options for each special needs child. The report follows a regular education teacher's adaptation of the curriculum to meet the needs of one learning disabled pupil in that school. Within the second setting, inclusion was mandated by administration, contrary to the faculty's recommendation to postpone full implementation for staff training. As a result, special education and Chapter 1 teachers worked directly within the classroom, achieving successful programs with those few teachers who invited collaboration in developing and presenting thematically based lessons. In other classrooms, though, facilitators were asked to support isolated skills programs by pulling children to the back of the room. The facilitating teachers were concerned that children with the most needs did not have as much access to services as they did under the former model. Further, little time was provided for collaborative planning and staff training. Recommendations are included for appropriate use of inclusion.

ESRICK, ELLEN, & PROCTOR, VIKKI. (1995, Spring). A K–8 all-school reading project. *Illinois Reading Council Journal, 23*, 45–49.

Describes an all-school reading project involving pupils, administrators, and staff from an experimental laboratory school. All children, ages 5 to 14, listened to the same story and met to discuss the book in hour-long, multiage groups. Thus, the steps in the project involved selecting a book with a theme that could involve a range of pupils, enlisting the entire school staff in reading and preparing for discussion, planning discussion questions for the groups, and organizing 700 children into multiage groups. The final step was discussion day in which groups of 15 children and 2 adults assembled in designated classrooms for conversations. Although most teachers followed a discussion format, several used the time for work on art projects related to the story. Two teachers asked children to respond without following specific question lists. Two others employed a kind of "lemming" experiment to prompt talk about blind adherence to directives versus following rules. Of the staff, 62% responded to a questionnaire evaluating the experience. All respondents approved of the project, and 50% checked that it should occur twice a year.

NAGAL, GRETA. (1993). "Good" groups: Learning from learners in first grade. In Philip H. Dreyer (Ed.), *Learning from learners: Fifty-seventh yearbook of the Claremont Reading Conference* (pp. 46–64). Claremont, CA: Claremont Graduate School.

Describes an experimental grouping configuration for literacy learning among 6 first grade classrooms during a 6-month period. The classrooms participating in the ethnographic study were selected because they avoided ability groups and instead designed new groups, which teachers believed would be good for every pupil. The groups provided opportunities for cross-status contacts, promoted enthusiasm and engagement, and afforded extensive exposure to reading, writing, listening, and speaking. Profiles of each of the 6 classrooms and grouping procedures are provided.

V–10 Corrective/remedial instruction

CLAY, MARIE M. (1994, Fall). Reading Recovery: The wider implications of an educational innovation. *Literacy, Teaching and Learning, 1*, 121–141.

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Discusses research that establishes that the Reading Recovery program achieves positive results in very different educational systems and with very different groups of children and reviews features that contribute to the program's success. The review focused on the program features that allow it to accommodate the needs of different individuals in diverse educational settings; to provide professional development for teachers; to support the transfer of the program to education systems in Australia, the United States, Canada, and England; to address and overcome the problems associated with programs, in special education; to seek further information from research as new questions surface; to disseminate program information to educators and administrators; and to continue the dynamic processes of change.

DeFord, Diane E. (1994, Fall). Early writing: Teachers and children in Reading Recovery. *Literacy, Teaching and Learning, 1*, 31–56.

Presents a descriptive study of teachers and children engaged in the writing component of the Reading Recovery lesson. Outcome data from a previous study were used to select subjects. Two teachers and their five pupils who achieved higher outcomes in Reading Recovery (scoring at the eighth and ninth stanines on the text reading subtest of the observation survey at the completion of the program) and two teachers and their seven pupils who achieved lower outcomes (scoring at or below the fifth stanine on the same assessment) were identified. The analysis used videotapes of lessons, student writing books, observation survey tasks, teachers' records of student progress, and teachers' lesson plans. Patterns of pupil progress and teacher decisions were contrasted between higher and lower progress children as a means of exploring differences and identifying effective teacher decisions. Findings revealed that teachers of higher outcome pupils allocated more time to writing in general and also spent a greater portion of lesson time on writing early in a child's program than did teachers working with lower outcome pupils. There were also marked differences in the way teachers of higher and lower outcome pupils integrated the texts pupils read into the writing activities. Because a higher number of common words was identified across the reading and writing of higher outcome children, it appeared that their teachers were able to orchestrate links between reading and writing more effectively.

Askew, Billie J., & Frasier, Dianne F. (1994, Fall). Sustained effects of Reading Recovery intervention on the cognitive behaviors of second grade children and the perceptions of their teachers. *Literacy, Teaching and Learning, 1*, 87–107.

Examines the sustained effects of Reading Recovery (RR) intervention on 54 second grade children who had completed RR and had been discontinued during their first grade year, and reports the perceptions of their current teachers as to program and pupil strengths. Scores on text readings, retellings, fluency dictation, and spelling of the discontinued pupils were compared with scores from 53 second grade peers who had no RR instruction. Teachers of the children completed a questionnaire assessing grades, reading group placement, placement in other school programs, basal/text placement, and perceptions of each child's performances and made subsequent predictions for each child's reading and writing growth in third grade. Discontinued RR children performed within the average of their second grade peers on text reading, dictation, and spelling. All but 3 children were able to read materials at or above second grade level. Both groups revealed self-correction rates and meaning-driven construction of text. No significant differences were found between the groups on any of the retelling indices. Although there was a significant difference between the groups on pacing, there were no differences on phrasing or smoothness. Fluency scores correlated significantly with dictation and spelling scores and with teachers' predictions for reading success. Classroom teacher predictions did not match children's performances, since teachers tended to rate pupils as average and to be heavily influenced in their ratings by fluency levels of the children and by their willingness to concentrate and their attentiveness in the class.

SMITH, NANCY. (1994, Summer). Reading Recovery data and observations from one Illinois site (Part II). *Illinois Reading Council Journal, 22*, 29–44.

Summarizes several findings on pupils who were enrolled in Reading Recovery (RR) instruction at different school sites. Progress of children who received 60 or more lessons but who were not discontinued is reported. Progress on 3 measures of Clay's Diagnostic Survey (writing vocabulary, dictation, and text reading level) suggested good improvement over the instructional period, but children were not able to work independently to problem solve on unfamiliar texts or to work at the average level in their classrooms. With instructional support, they were able to read at high first grade level. Reasons for the discrepancy between instructional level and independent level were hypothesized as conflicting instructional focuses between the RR teaching and the classroom teaching. In another part of the report, children who had discontinued were studied to see if they continued to make gains after their return to the classroom. These children continued to grow in their reading skills. When compared to control group children who had not experienced RR teaching, growth by RR children was greater.

COX, CAROLYN; DOUGHDRILL, CAROLYN; ELLIOT, MONA; KIRKPATRICK, VICKI; ODERMAN, ANITA; & POMROY, NORMA. (1995, Spring). Intensive individualized literacy program: A modified recovery program. *New Mexico Journal of Reading, 15*, 58–63.

Presents case studies of two children, a first grade girl and a fifth grade boy, who were taught using principles and techniques derived from Reading Recovery. Designed by teachers, the derivational program is titled Intensive Individualized Literacy Program (IILP) and is implemented in schools representing different communities. Each teacher initially identified two pupils with whom to work for 12 weeks. Diagnostic tests were administered to each child, including tests of alphabet recognition, book handling, and sight word recognition for younger children. Older children received tests of spelling, dictation, and reading. Daily lessons included writing practice, rereading familiar books, writing a sentence, word analysis, and attempting a new book. Running records of reading strategies were taken for each new or unfamiliar book. Nearly half of the 27 children receiving IILP training no longer required Chapter 1 services. Although the first case study made gains in sight word recognition, with writing a list of words, using multiple strategies, and knowledge of letters, her new skills did not show up as clearly in the regular classroom. The fifth grader read first grade level books with ease, had a good oral vocabulary, and used context clues well at the outset of his tutoring. After 12 weeks, he was reading at fourth grade level, read more attentively, and had improved grades.

GOYEN, JUDITH D., & MCCLELLAND, DAVID J. (1994). Pause, prompt and praise: The need for more research. *Journal of Research in Reading, 17*, 108–119.

Evaluates the effectiveness of the pause, prompt, and praise technique as a peer-tutoring procedure for pupils who were identified as having reading difficulties. Subjects were 18 children in grade 4 and 18 in grade 6 in a governmental school in Sydney, Australia, who were identified as being the lowest performers on the accuracy scale of the Neale Analysis of Reading Ability. Grade 6 pupils were assigned as tutors to grade 4 pupils, with each tutor-tutee pair randomly assigned to one of three treatments: tutors trained in pause, prompt, and praise; tutors given no explicit training; and a control group with no tutoring. Tutoring was implemented for 21 sessions of 25 minutes duration each. At the end of 7 weeks, children were reassessed with a parallel form of the Neale scale. Overall gains were highest for pupils in the trained tutor treatment. Statistically significant differences in gain scores were found between treatments for the fourth grade tutees and the sixth grade tutors. Significant differences were also found between gains of pupils in the combined trained and untrained tutor

treatments and the gains of control groups at both grade levels, suggesting that the tutoring experience rather than the specific procedure was effective. A subsequent ANCOVA over posttest accuracy scores revealed no significant difference between treatments at either grade level. The researchers posit that the finding of no significant difference casts doubt on the validity of the majority of studies conducted on the pause, prompt and praise methodology.

PLUCK, MERYL-LYNN. (1995). Rainbow reading programme: Using taped stories. *Reading Forum NZ, 1*, 25–30.

Reports the progress made by pupils as a result of the Rainbow Reading Programme, a read-along, taped reading program involving repeated readings. The sample consisted of 43 pupils referred for reading assistance and determined to have reading levels below their CAS and yet above the 6.5–7.0 year level (the minimum level needed for this program). The subjects ranged in age from 7.8 years to 12.8 years; their reading levels at the beginning of the project ranged from 6.5–7.0 years to 10.0–11.0 years. Instructional reading levels were determined using informal prose inventory passages that were administered in February 1993, August 1993, December 1993, and February 1994. All subjects were required to listen to taped stories at their current instructional reading levels, using personal cassette players for 15–25 minutes daily while they read along silently. Prior to the first practice, teachers gave subjects a short, oral orientation to the story. Pupils practiced reading the same story with tape support until they decided they could read it fluently and accurately without support. During conference times, teachers checked accuracy, rate of reading, fluency, strategies in operation, and comprehension. Teachers interpreted performance and recommended further readings at the same level or advancement to a harder level. Subjects spent between 9 and 32 weeks on the program. On average, they improved their reading to the extent that they were reading 0.5 years below their CAS . They experienced average gains of 2.2 years. At the final testing, 23 of the 43 subjects read at levels equivalent to or higher than their CAS.

HURFORD, DAVID P.; JOHNSTON, MARK; NEPOTE, PAULA; HAMPTON, STEPHANIE; MOORE, SHELLY; NEAL, JEANETTE; MUELLER, ANGELA; MCGEORGE, KIMBERLY; HUFF, LILLIAN; AWAD, ANGELA; TATRO, CLAYTON; JULIANO, CHRISTINE; & HUFFMAN, DENISE. (1994, December). Early identification and remediation of the phonological-processing deficits in first-grade children at risk for reading disabilities. *Journal of Learning Disabilities, 27*, 647–659.

Provides pupils identified as at risk for reading difficulties in the beginning of first grade with an intervention program to remediate their poor phonological processing skills. Initially, 486 first-quarter first graders from 4 school systems were assessed on their reading (WRMT-R), phonological processing skills (phonemic discrimination and segmentation tasks), and intelligence (PPVT-R). Based on this assessment and using the classification data from a previous study, 99 children were identified as being at risk for reading difficulties: 53 pupils at risk for reading disabilities (RD) and 46 pupils at risk for becoming "garden variety" poor readers (GV). Half of the RD and GV groups received a phonological processing intervention, and the other half of each group served as controls. The training tasks entailed intrasyllable discrimination training, phonemic blending, and phonemic segmentation. The training sessions were administered for 15 to 20 minutes twice a week, for approximately 20 weeks. Posttraining assessments included alternate forms of the WRMT-R, the PPVT-R, and the phonological measures. Analyses of the results indicated that the training procedure was effective in increasing the phonological processing skills of the trained participants and also increased their reading ability. Subjects in both the RD and GV trained groups benefited from the training.

COTHERN, NANCY B. (1995, Spring). The university reading clinic: A setting for authentic children's research. *Journal of Reading Education*, *20*, 2–28.

Describes the rationale, procedures, and products of the Literacy Workshop (LW) for Children, conducted annually on the urban campus of a midwestern U.S. university. The LW serves two populations: graduate students earning a reading endorsement and local children from kindergarten through fifth grade who are reluctant readers. Graduate students review, gather, and learn to administer assessments in the first 3 days of the workshop. The individual assessments include an interest inventory, informal reading inventory, features list (spelling), IQ test, reading and writing attitude scales, a dictated story, belief statements about learning, and an auditory discrimination scale. Children are then grouped according to interest, rather than age or ability, and are assigned to a graduate student mentor who shares a similar interest. Reading, writing, speaking, and listening are then developed through group-specific, high-interest activities and through project development. The children complete the project as well as a project history or log, serving as a record of authentic research. Graduate students also pick a learning project, and children observe the adult in the process of learning. The last week of the LW is devoted to parent conferences in which the formal case report is discussed. Analysis of pupil belief statements over 3 years indicated that children viewed LW learning as being significantly different from school learning, valued the opportunity to make decisions, and valued the process of interaction.

SCHUNK, DALE H., & RICE, JO MARY. (1993, Fall). Strategy fading and progress feedback: Effects on self-efficacy and comprehension among students receiving remedial reading services. *The Journal of Special Education*, *27*, 257–276.

Investigates the effects of strategy verbalization with fading and strategy value feedback on pupils' achievement outcomes. Subjects were Chapter 1 fifth grade pupils selected from two schools. The sample comprised 44 pupils who scored at or below the 30th percentile on the reading subtest of the SRA Survey of Basic Skills and who had adequate decoding skills according to teachers. The 16 boys and 28 girls ranged in age from 10.1 to 11.6 years and were predominantly lower middle class. Ethnic composition of the sample was 24 Hispanic, 11 white, 8 African American, and 1 Asian. All subjects were pre- and posttested with researcher-designed measures of self-efficacy, comprehension skill, and self-reported strategy use. Pupils were assigned randomly within gender, ethnic background, and school to 1 of 4 experimental conditions: fading only, feedback only, fading plus feedback, and no fading or feedback. All subjects received 12 35-minute instructional sessions focused on identifying main ideas. They were all taught and verbalized a strategy. For those in the fading groups, the teacher modeled application of subvocalizing and reminded pupils to say each step silently before using it. Pupils assigned to conditions receiving feedback received strategy-value feedback linking their successes at answering comprehension questions with their prior application of the strategy. Posttests were administered 2 weeks following completion of the instructional program. To test the hypotheses, an ANOVA was applied to each of the 3 posttest measures, using the experimental condition as the treatment factor. Correlation and regressions analyses were also applied to determine the relations among variables. Results indicated that the no-fading/no-feedback condition scored significantly lower than the other 3 conditions on posttest self-efficacy, comprehension skill, and self-reported strategy use. Fading plus feedback led to higher reported strategy use compared with the fading-only and feedback-only conditions and to higher comprehension skill compared with the feedback-only condition. Correlation analyses revealed that self-efficacy was positively related to strategy use and skill; strategy use and skill were positively related. SRA score was not significantly related to the other variables.

VAN DEN BOSCH, KAREL; VAN BON, WIM H.J.; & SCHREUDER, ROBERT. (1995). Poor readers' decoding skills: Effects of training with limited exposure duration. *Reading Research Quarterly, 30*, 110–125.

Tests whether training in decoding under conditions of limited exposure duration is more beneficial than practice in reading words without constraints on the exposure duration. Subjects who demonstrated elementary knowledge of grapheme-phoneme correspondences were selected from two Dutch schools for learning disabled children. The sample included 62 pupils (43 boys, 19 girls) who ranged in age from 7.8 to 12.8 years, with the mean of 9.11 years. A pretest-training–posttest design was used. The sample was divided into three groups (n = 21, 21, and 20), matched on two pretest measures: accuracy in pseudoword naming and automaticity of pseudoword decoding. Groups were randomly assigned to one of three training conditions: limited exposure duration (flashcard group), unlimited exposure duration (reading aloud group), and a control condition in which no training was given. Training materials for the experimental groups consisted of monosyllabic pseudowords with one- or two-consonant clusters. The training programs consisted of 16 training sessions of approximately 25 minutes each. Subjects practiced individually twice a week for 8 weeks. For subjects in the flashcard group, reading was put under time pressure by presenting the pseudowords briefly with exposure duration controlled on-line as a function of accuracy. The accuracy rate was maintained at a constant level of approximately 67%. A pseudoword naming task was used to investigate the effects of training on decoding accuracy and decoding speed. A word naming task was used to examine effects of training in pseudoword decoding on accuracy and speed of normal word identification. A picture-word interference task was used in order to investigate whether training affected automaticity of word and pseudoword processing. A sentence verification task was used to examine whether training in decoding would affect text comprehension performance. Effects of training were examined using multivariate and univariate ANOVAS. Results suggested that poor readers' identification skills improved as a result of training in pseudoword reading for those children who practiced under conditions of limited exposure duration. With subjects for whom no limits of presentation time were set, training appeared to have negative effects.

MERRY, ROGER, & PEUTRILL, IRENE. (1994, September). Improving word recognition for children with reading difficulties. *British Journal of Special Education, 21*, 121–123.

Describes a strategy for helping children develop instant recognition of function words and presents evidence of its success. Subjects were 14 boys and 8 girls, aged 7 to 9, all of whom had been identified as having reading difficulties. In five 15-minute sessions held over a 5-week period, half the pupils were taught by the experimental strategy. This involved instruction of 6 function words. Each word was presented on a card adjacent to a picture, and the child was encouraged to use the word in a sentence that referred to the picture. Once the child had been taught 6 words, the word cards were shuffled, and the child was asked to match the word card with the picture. The child then read a text containing the new words. At the beginning of the next session, words from the previous session were reviewed, and new words were taught using the experimental strategy. Children in the control group were taught the same words using a similar strategy, but which involved no use of picture cues. Simple comparisons of the total number of words learned with and without pictures by children in each group showed the experimental strategy to be superior to the control strategy.

DAS, J.P.; MISHRA, RAMA K.; & POOL, JUDITH E. (1995, February). An experiment on cognitive remediation of word-reading difficulty. *Journal of Learning Disabilities, 28*, 66–79.

Tests the efficacy of a theoretically based program for cognitive remediation of decoding deficit. The theory underlying the program identified four major cognitive processes: planning, attention, simultaneous, and successive (PASS) processing. Using those four processes, a remedial program (PASS remedial program, or PREP) was designed consisting of 10 structured tasks aimed at developing internalized strategies for successive processes (6 tasks) and simultaneous processes (4 tasks). Deficits in either of the 2 may lead to poor decoding. Thus, through "global process" training and curriculum-related "bridging training," the remedial program was aimed at enabling application of internalized strategies arrived at inductively for learning word decoding and spelling; the program did not provide direct teaching rules or exercises. Fifty-one fourth grade children with decoding difficulties were divided into 2 groups. One group received the PREP program, including global and bridging processing training; the other received no treatment. In the second part of the study, children from the no-treatment group received either the global or the bridging part of the PREP. The relative efficacy of training was tested by pre- and posttest performance on a standard word-decoding test (WRMT-R), as well as on some cognitive tests. The largest improvement in word decoding occurred for the PREP combined global and bridging treatment.

STOYA, SUSAN. (1995, Spring). Portraits of success: Two students in Reading Recovery. *Language and Literacy Spectrum, 5*, 35–41.

Reports the progress of 2 first graders as they learned to read within a Reading Recovery (RR) program. The first student had scored lowest in her class on Clay's Observational Survey and successfully demonstrated 6 of 24 tasks on the Concepts About Print Test (CAP). She wrote 5 sounds with their correct letters, but more typically relied on a limited configuration of letters as she wrote. Her instruction provided for rereading familiar books, rereading a book read the previous day (to provide data for a reading record), letter identification or learning how words work, writing a story, rebuilding a cut-up story, and being oriented to a new book. After about 65 half-hour lessons, she was ready to "discontinue" from RR. At that point, she knew all letters of the alphabet and had responded correctly to 21 items on CAP. She read 17 of 20 high-frequency words, wrote 51 words, and read on first grade level. The second student also scored among the lowest in her class. At the outset, the child could identify 38 letter forms, read 1 word of 20 on a word task, and scored 16 of 24 on the CAP. On the dictation test, she could represent 8 sounds with their corresponding letters. After 42 lessons, she knew all letter names, identified 12 of 20 words on the word test, wrote 40 words in 10 minutes, and successfully represented 35 of 37 sounds on the dictation task. Her reading level was judged to be first grade. Both girls continued to make progress through the first years of schooling.

SIMMONS, DEBORAH C.; FUCHS, LYNN S.; FUCHS, DOUGLAS; MATHES, PATRICIA; & HODGE, JANIE PATE. (1995, May). Effects of explicit teaching and peer tutoring on the reading achievement of learning-disabled and low-performing students in regular classrooms. *Elementary School Journal, 95*, 388–408.

Examines the effects of explicit teaching and peer tutoring on the reading achievement of pupils with learning disabilities (LD) and nondisabled, low-performing readers (LP) in academically integrated, general education classes. Subjects included 24 general education teachers in grades 2–5, 44 LD pupils, and 24 LP pupils. The sample was drawn from five schools in a southeastern U.S. suburban area representing low to upper middle-socioeconomic levels. All teachers volunteered to participate. A total of 16 experimental teachers were stratified according to the number of LD pupils in their reading groups and assigned randomly to explicit teaching ($n = 9$) or explicit teaching plus peer tutoring ($n = 7$) conditions. Eight additional teachers volunteered to serve in a control condition. Explicit teaching was conducted in

teacher-directed group reading instruction; peer tutoring occurred outside class during independent reading time. Teachers and pupils were observed during teacher-directed instruction. Reading achievement was measured pre- and post intervention using two instruments, the Comprehensive Reading Assessment Battery and the Stanford Achievement Test. Analysis of observations revealed no significant differences among groups on teacher or pupil behaviors during teacher-directed group instruction. A MANOVA performed on reading achievement scores indicated no significant differences for learner type or the interaction between learner type and treatment. Pupils in the explicit teaching plus peer tutoring condition scored significantly higher on reading fluency and comprehension measures than did explicit teaching or control subjects.

CAIRNEY, TREVOR H., & MUNSIE, LYNNE. (1995). Parent participation in literacy learning. *The Reading Teacher, 48*, 392–403.

Reports the procedures and evaluation of a stage 1 project designed to enhance parental participation in children's literacy development. The project was conducted in an urban community located in the western suburbs of Sydney, Australia, and included 25 parents (24 females, 1 male) whose 34 children (aged 1 to 12) attended one elementary school and the adjacent preschool. Also included were 75 pupils selected randomly from all classes within the elementary school to serve as a control group for comparison purposes. Participating parents had left high school early and had no postsecondary school education. The majority had not proceeded beyond junior high school, and several had limited literacy. Training content covered basic child development, issues concerning the nature of reading and writing, strategies for assisting children with reading and writing, the use of the library for research, and the development of self-esteem. To evaluate program effects, small group structured interviews, large group unstructured interviews, and individual interviews were conducted with all parents before and after the program. Group interviews were also conducted with pupils and staff. A written survey was given to all parents at the conclusion of the program. Pre- and posttest measures of literacy administered to all experimental and control pupils included the Australian Council for Educational Research (ACER) Primary Survey comprehension and vocabulary tests and the ACER spelling test. A test of reading attitudes was also devised and administered. The quantitative test data were analyzed using ANCOVA, and the qualitative data were analyzed using the principles of grounded theory. The process of inductive analysis yielded nine major themes: (1) The program had an impact on the way parents interacted with their children. (2) The program offered parents strategies they did not have before. (3) The program helped parents to choose resource material, help children with book selection, and use libraries more effectively. (4) Parents gained new knowledge. (5) The parents' families were affected. (6) The parents began to share their insights outside the family. (7) Parents grew in confidence and self-esteem. (8) Children's literacy performance levels, attitudes, and interests were positively affected. (9) The program had an impact on the school and preschool.

UNWIN, CYNTHIA G. (1995). Elizabeth's story: The potential of home-based family literacy intervention. *The Reading Teacher, 48*, 552–557.

Presents observations from 9 months of on-going involvement with one single mother and her children during a weekly home-based family literacy intervention. Examples of the children's writing and their school learning progress are included, as are observations and insights of the researcher as she interacted with the family members. The researcher affirms the importance of developing interventions that are convenient, personalized, and nonthreatening to the participants, if family literacy interventions are to be successful.

RUBERT, HELENE. (1994). The impact of a parent involvement program designed to support a first-grade reading intervention program. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 230–239). Chicago, IL: National Reading Conference.

Asks how parent tutoring and strategy use changed over time as a result of participation in a home-school intervention program. The 3 families in the case studies were selected because their children qualified for inclusion in a first grade early intervention program. Parents were trained to support reading in the home (echo reading, reading aloud, and independent reading) in a series of 3 workshops over a 3-month period of time. After each workshop, each mother was asked to provide a tape of her child reading at home to document parent-child interactions and the degree to which she was applying new strategies. Data sources were home book-sharing tapes, think-aloud interviews, questionnaires, and surveys. Results indicated that parents needed scaffolds themselves while they were learning the new strategies. Although each mother began the study using different amounts and types of strategies, all demonstrated growth in strategy use. Acceptance and usage of new strategies depended on the parent's preconceived notions and experiences with beginning reading, the child's response to the parent, acceptance and understanding of the problem, and a good working relationship between family and school.

LETO, DEBORAH J. (1995, February). Focus on research: Creating community with an after-school tutoring program. *Language Arts, 72*, 128–136.

Describes a 12-week ethnographic study documenting the program activities and the interrelationships among individuals from three academic institutions (a university, a community college, and a public school district) through A Real Community Helps (ARCH) after school program. Students from a public high school and from the community college and university tutored third grade children twice a week. Family caregivers were often drawn into the program because of the location of the school, which was in the middle of the housing project where the tutees lived. Data are reported from the researcher's participant observations, interviews, and proxemic study (the study of the spatial requirements of humans). Vignettes demonstrate the importance of the project and the relationships between tutors and tutees. Proxemic observations suggested that interaction patterns between tutors and tutees were based on the personal relationships that were established between the two groups and the sense of community that developed.

KNAPP, MICHAEL S., WITH ADELMAN, NANCY E.; MARDER, CAMILLE; MCCOLLUM, HEATHER; NEEDELS, MARGARET C.; PADILLA, CHRISTINE; SHIELDS, PATRICK M.; TURNBULL, BRENDA J.; & ZUCKER, ANDREW A. (1995). *Teaching for meaning in high-poverty classrooms*. New York: Teachers College Press.

Reports on a 2-year study conducted in schools and classrooms serving large numbers of children from low-income families. The focus was on instructional practices that were found to promote children's understanding and build meaning into their school learning experience. Three academic areas concentrated on were mathematics, reading, and writing. A total of 140 classrooms in California, Maryland, and Ohio were observed; teachers were interviewed; and daily classroom logs were maintained. The two opening chapters deal with how teachers established classroom order and responded to cultural diversity. In Chapters 3, 4, and 5, the authors describe attempts to teach for meaning in the 3 academic areas. Supplemental instruction is examined in Chapter 6. Chapter 7 summarizes evidence regarding the effectiveness of meaning-oriented approaches in helping children master advanced and basic skills of literacy and numeracy. Characteristics of the teachers, the nature of the pupils, and the features of the policy environment as they support or inhibit the introduction of teaching

for meaning in high-poverty classrooms are discussed in Chapters 8 and 9. The final chapter summarizes the arguments and draws instructional implications for practitioners. The findings of this study support teaching for meaning in such classrooms. In reading instruction, meaning-oriented classrooms placed a high priority on comprehension. Extensive opportunities were given children to read text; they were taught strategies for comprehending and were offered numerous opportunities to talk about what was read and to integrate reading and writing. In contrast, skills-oriented classrooms had children spend large amounts of time on decoding and other basic reading skills and much less time on reading and understanding what was read.

V–11 Teaching bilingual and other language learners

ESCAMILLA, KATHY. (1994, Fall). Descubriendo la lectura: An early intervention literacy program in Spanish. *Literacy, Teaching and Learning, 1*, 57–70.

Examines whether Descubriendo La Lectura (DLL), the application of Reading Recovery in Spanish, achieves accelerated learning with Spanish-speaking first grade pupils. Subjects were 180 first grade, Spanish-dominant pupils who attended six elementary schools in a large urban school district in southern Arizona. All subjects were identified as Spanish dominant and were assigned to three conditions (DLL, control, comparison) on the basis of initial testing, recommendations of teachers, and the availability of the DLL program. Pretesting was completed using the Spanish Observation Survey (SOS) and the Aprenda Reading Achievement Test. DLL subjects (n = 23), chosen from four schools that offered the DLL program, were in the bottom 20% of their class, had the lowest scores on the SOS, and had the lowest class ranking by their teachers. Control group subjects (n = 23) were chosen from two schools that did not offer the DLL program and were identified as being in the lowest 20% of their class on the basis of the preassessments. All pupils not identified as DLL or control group subjects from the six schools were assigned to the comparison group (n = 134). All subjects received literacy instruction in Spanish; DLL subjects received at least 60 individual lessons from a specially trained teacher using the procedures paralleling the Reading Recovery program. Posttesting was completed in the spring using alternate forms of the SOS and the Aprenda. Pre- and posttest results on both measures were compared and analyzed (t tests) to identify significant differences between groups. To determine average achievement, average bands (plus and minus 0.5 standard deviation) were calculated for all six observation tasks on the SOS. Analyses revealed that DLL program subjects made significant gains in literacy acquisition during the course of the project. They reached the average band on all measurement criteria and surpassed both control and comparison subjects.

KUCER, STEPHEN B. (1995, January). Guiding bilingual students "through" the literacy process. *Language Arts, 72*, 20–29.

Describes a third grade classroom of Mexican American children, bilingual in Spanish and English and literate in Spanish, who were provided with various strategies to aid their growth in English literacy. The author was a participant-observer in the classroom for 3 mornings a week during the year. Information from informal literacy assessments collected at the beginning of the school year led to the development of a holistic curriculum. As part of the curriculum, pupils were involved in designing a series of strategy wall charts related to 4 literacy blocks frequently experienced: reading strategies, reader response strategies, spelling strategies, and writing strategies. Charts were reviewed and new strategies added throughout the year. Pupils were engaged in small group conferences providing demonstrations and mediations of strategies. Observations and field notes of pupils using the strategies as they interacted with print form the basis for noting changes in pupil-text interactions during the

year. Changes are presented in chart form in the article. Pupils were interested in why the strategies were to be learned and used; they needed to be convinced that a given text was worthwhile. When texts were found interesting, engaging, or pupils felt some degree of ownership, they were more willing to experiment with alternate strategies to obtain meaning. It is felt that the shift to a process-oriented curriculum and the introduction of literacy strategies does not guarantee pupils will apply what is being taught; motivation and engagement are prerequisites.

LAFRAMBOISE, KATHRYN, & WYNN, MARGIE. (1994). Oral participation in shared reading and writing by limited English proficient students in a multiethnic class setting. *Reading Horizons, 35*(2), 95–109.

Describes some patterns of oral participation that limited English proficient (LEP) children use during shared reading and writing experiences, as well as the types of language and cognitive support that enable LEP pupils to participate in group discussions and interactions. Two groups of children were created as language microcosms of the kindergarten through second grade classrooms from which they were drawn. Group 1 were Hispanic, Vietnamese, and white mainstream kindergarten and first graders. Group 2 were African American, Hispanic, Arabic, and white mainstream second graders. The researchers, who were able to converse only in English, designed and taught 8 hours of instruction over 4 weeks. Data were collected through audio- and videotapes, field notes, pupils' work, and interviews. Observations revealed that talk among children was almost always topic related and showed language participation at a variety of levels. However, silence did not always signal lack of comprehension. At times, children were shyer in larger groups; at other times, the researchers noted that children were in their "silent period," understanding some of the new language but not yet comfortable in speaking. Pupils showed comprehension through answers to yes or no questions or selecting responses from several choices. They were supported in their language growth by rereadings of predictable texts, by engaging in concrete story-related experiences, by extensive exposure to books and photos, by using familiar books for rereading and as models for writing, and by teachers' asking open-ended questions to several children so LEP pupils could hear the language for possible answers.

ECHEVARRIA, JANA, & MCDONOUGH, RENEE. (1995). An alternative reading approach: Instructional conversations in a bilingual special education setting. *Learning Disabilities Research & Practice, 10*(2), 108–119.

Implements instructional conversations (IC) and evaluates the effectiveness as an approach with pupils in a bilingual special education setting. IC is defined as an interactive instructional approach with the goal of engaging pupils in comprehension-fostering activities that encourage them to analyze text, make more relevant inferences and predictions, and use critical thinking. Participants ranged from 6- to 10-years old and were enrolled in a self-contained classroom; most were Hispanics classified as either LD or mildly mentally retarded. Data collection included naturalistic observation, videotape, teachers' self-report, and interviews conducted over 18 months with 1 teacher. A total of 16 observations and 17 teacher interviews was included. Lessons were videotaped about once a month. Several themes emerged from the data: (1) ICs promoted oral participation and pupil-to-pupil interactions during reading lessons, thereby providing opportunities for additional language development; (2) ICs provided a holistic context for learning; and (3) adaptations had to be made for the lesson to be successful. ICs did not replace teaching of acquisition of skills and knowledge but seemed to offer additional avenues for learning within a meaningful context.

SHANAHAN, TIMOTHY; MULHERN, MARGARET; & RODRIGUEZ-BROWN, FLORA. (1995). Project FLAME: Lessons learned from a family literacy program for linguistic minority families. *The Reading Teacher*, *48*, 586–593.

Describes a family literacy program (Project FLAME—Family Literacy: Aprendiendo, Mejorando, Educando) providing services to more than 300 families in Latino neighborhoods of Chicago and shares insights learned over 5 years on how to develop and implement high-quality family literacy instruction for linguistic minority families. The authors affirm that the strength of family literacy programs lies in the ability of the programs to foster autonomy and self-reliance within families, schools, and communities.

SODA, TAKESHIRO; IDO, OSAMU; & YOKOYAMA, AZUMA. (1993, April). A comparison of two methods of English language instruction. *Science of Reading*, *37*, 10.

Compares two methods of teaching English to Japanese students. Eight classes from 3 colleges were included in the study: 7 as experimental groups in a listening/speed-reading approach and one control group using the translation approach. Pre- and posttests of reading, listening skills, basic reading skills, and a cloze test were administered. Six of the experimental groups outperformed the control group on various measures: 1 on the basic reading skills test, 1 on the basic listening skills test, and 4 on the cloze test.

FANG, ZHIHUI. (1994). Priority of reading instruction revisited: Evidence from a regression analysis of adult ESL learners' reading ability. *Reading Horizons*, *35*(2), 151–160.

Addresses whether reading instruction for ESL students should focus on fostering the learners' linguistic abilities or on increasing their store of background knowledge. Participants in the study were 30 adult students enrolled in an intensive English language training program at a large university in southern China. Ten students were randomly selected from each of 3 levels of language proficiency (low to advanced), as determined by their scores on the Michigan Placement Test. Texts were 4 passages of approximately 500 words each, 2 familiar passages and 2 unfamiliar. Each passage was followed by 15 multiple-choice questions covering main idea, inference, and other skills. Students were randomly assigned 2 of the passages and a total of 30 questions. In addition, a 40-item comprehensive grammar test was used to assess the subjects' language proficiency. Results of regression analysis showed that both language proficiency and text familiarity made significant contributions to text comprehension. When text was unfamiliar, contributions of linguistic knowledge to comprehension were greater than when text was familiar. Because both linguistic knowledge and prior knowledge contribute to reading comprehension, the researcher concludes an integrative approach to reading instruction is necessary.

HAGUE, SALLY A., & SCOTT, RENÉE. (1994, Fall). Awareness of text structure: Is there a match between readers and authors of second language texts? *Foreign Language Annals*, *27*, 343–363.

Designs and conducts an investigation to determine if and with what frequency 5 rhetorical structures common to English language text appear in reading materials of beginning level high school and college Spanish textbooks. A total of 39 passages found in 15 textbooks were reviewed; 14 of the texts were used to teach Spanish as a foreign language and 1 was used to teach Spanish to Spanish speakers. The passages analyzed were selected from the beginning, middle, and ending portions of the textbooks; were informational in content; and contained at least one paragraph of connected text. The analysis yielded the following: 59% of passages were classified as descriptive, 10% as collection, 15% as comparison, 10% as causation, 2.5% as problem/solution, and 2.5% as other. When analyzed for a match be-

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tween text type and student awareness of text structure as determined by other investigations, it was noted that the texts patterns found were not those that are most helpful in aiding students with their comprehension. Further analysis determined that 21 of the 39 passages were authentic text, and 18 appeared to be written expressly for the textbook. Additionally, the authors studied the signal words contained in the passages and found only 61 words used to signal the structure of the text.

V–12 Tests and testing

KEAR, DENNIS J., & POTTHOFF, DENNIS E. (1995, Spring). Literacy portfolios in Kansas: Classroom snapshots. *Kansas Journal of Reading, 11*, 24–31.

Offers descriptions of 3 different levels of portfolio implementation in Kansas schools. A recent survey by the researchers indicated that, although rarely mandated, student portfolios are being used by one or more teachers in 70% of Kansas elementary schools, 74% of middle schools, and 52% of high schools. The 3 cases are compared by examining the context, purposes, mechanics of implementation, time requirements, assessment/evaluation procedures, benefits, challenges, and suggestions for other teachers. In the first case, a fifth grade teacher relied on portfolios to document pupil growth over the course of the school year and worked with children to select items that provided evidence of academic progress. Because the class work was in the form of units, work samples moved from integrated unit folders into the reading-related folders. The teacher believed that pupils' "ownership" of their learning was the primary benefit. The second case featured a building-wide portfolio plan for a high school. Four English teachers used writing portfolios as a way to monitor growth, as well as to help students prepare a body of writing for college admissions. A long-term goal was to use the writing portfolio as an outcome assessment tool. Some individual entries were scored on analytic scales; all were graded for report card purposes. The third example illustrated key components in a district-wide K–12 portfolio plan. The intent was to improve the instructional and assessment programs. Portfolios were used to show student growth in literacy through writing samples, books read, checklists, and audiotapes of reading.

SALINGER, TERRY, & CHITTENDEN, EDWARD. (1994, October). Analysis of an early literacy portfolio: Consequences for instruction. *Language Arts, 71*, 446–452.

Discusses findings of research collected in the South Brunswick, New Jersey, schools over a 5-year period as teachers collaborated with administrators and consultant researchers to develop and implement the early literacy portfolio. Functions of the portfolio are described, as are the changes in portfolio procedures and contents that developed over time. Development and use of a 6-point scale of early literacy growth is described, as are processes of moderation using the instrument. Statements from interviews with primary teachers about the process of portfolio development and the portfolio product are included. Uses of the portfolio for making instructional decisions are described.

DILENA, MIKE, & VAN KRAAYENOORD, CHRISTINA E. (1995, May). Whole school approaches to assessing and reporting literacy. *Australian Journal of Language and Literacy, 18*, 136–143.

Cites findings from a study of how 6 state schools and 2 nongovernment schools in South Australia, and 6 nongovernment schools in Queensland attempt to monitor the literacy of their pupils. The project, sponsored by the Department of Employment, Education and Training, was undertaken in an effort to investigate how schools were implementing a whole-school approach to assessing and reporting literacy levels of their pupils. Researcher teams

visited schools to collect data. Visits involved tape-recorded interviews with administrative teams, classroom teachers, and pupils in the 14 schools. Wide variation among the schools was noted with no schools having formal, written literacy assessment policies. Described are some of the ways in which schools in the study conceptualized assessment and reporting as a whole school responsibility. It was concluded that essential to changing and developing teachers' knowledge of literacy assessment and reporting are time, professional development, and encouragement of teachers.

WOLF, DARLENE F. (1993, Fall). Issues in reading comprehension assessment: Implications for the development of research instruments and classroom tests. *Foreign Language Annals, 26*, 322–331.

Asks whether the type of assessment task used and the language in which second-language (L2) learners are assessed affect their ability to comprehend. Examined first is the research literature of the effects on comprehension performance of multiple-choice questions, constructed response tasks, cloze tasks, recall protocols, and multiple tasks. Research findings suggest that multiple-choice items, open-ended questions, cloze tasks, and recall protocols may not test L2 learners' comprehension adequately or accurately. These tasks may assess different language abilities; thus, results among studies may not be comparable. A second section of the article reviews the research on the effect of the language in which the test appears on L2 learners' comprehension. Findings from the literature suggest that the language in which subjects are assessed does affect their ability to demonstrate their comprehension. Recommendations and implications for test construction for L2 learners are given.

LAZARUS, BELINDA DAVIS, & MCKENNA, MICHAEL C. (1994, October/November/December). How special educators assess reading comprehension: Some concerns. *Reading Psychology, 15*, 203-222.

Describes the roles of prior knowledge, integration of information, and prose organization in text comprehension. Six tests commonly used by special educators are then evaluated in terms of each test's sensitivity to the integration of these 3 factors, as opposed to being measures solely of recall of intrasentential information. The following tests were selected for analysis: (1) PIAT-R, (2) Kaufman Test of Education Achievement, (3) WJPE Battery–Revised, (4) Brigance Test of Basic Skills, and (5) Brigance Test of Essential Skills. Results of the inspection indicated that although contemporary reading theory views reading comprehension as a multidimensional complex of reader background, reading materials, and integrative skills, the 6 tests commonly used assess either a single dimension of reading comprehension or produce data that are not immediately useful. The researcher questions whether subtests entitled reading comprehension measure comprehension of connected text or simply basic vocabulary understanding.

HENK, WILLIAM A., & MELNICK, STEVEN A. (1995). The Reader Self-Perception Scale (RSPS): A new tool for measuring how children feel about themselves as readers. *The Reading Teacher, 48*, 470–482.

Describes the psychological construct of reader self-efficacy and introduces the RSPS, a scale to assess how readers judge themselves as readers and perceive their abilities to perform reading tasks. The RSPS has 1 general item and 32 subsequent items representing four scales: Progress, Observational Comparison, Social Feedback, and Physiological States. Children are asked to read each item and rate their degree of agreement with the statement. Raw scores are compared with the norming data. The developers suggest the scale can be used for individual or for group assessments and interventions. Appendices include the instrument, directions for administration and scoring, and validation procedures for the construct.

McLain, K. Victoria Mayer; Gridley, Betty E.; & McIntosh, David. (1991, November/December). Value of a scale used to measure metacognitive reading awareness. *Journal of Educational Research*, *85*, 81–87.

Reports the results of a study designed to determine the psychometric properties of the Index of Reading Awareness (IRA), a 20-item multiple-choice assessment instrument designed to measure four aspects of metacognition in reading: evaluation, planning, regulation, and conditional knowledge. Subjects were 145 children in grades 3, 4, and 5 of a laboratory school affiliated with a university in the midwestern United States. Pupils completed the IRA and four subtests of the WRMT-R: Word Identification, Word Attack, Word Comprehension, and Passage Comprehension. Cronbach's alphas were determined for the four IRA scales: evaluation (.31); planning (.32); regulation (.15); and conditional knowledge (.20). Internal consistency reliability for the total score was .61 and for the subscale scores .56. Coefficients between the IRA and WRMT-R were moderate, with substantial intercorrelation coefficients among the clusters and subtests of the WRMT-R. Stepwise multiple-regression analyses using the Reading Comprehension and Passage Comprehension subtests suggested that the IRA adds a significant but small percentage to the explanation of reading comprehension but did not add to the prediction of passage comprehension scores. The researchers suggest caution in using the instrument as a whole and note that subscale scores should not be used.

Hannavy, Sybil. (1994). Middle infant screening test and forward together recovery programme. In Alison B. Littlefair (Ed.), *Literacy for life*, (pp. 109–117). Cheshire, England: United Kingdom Reading Association.

Describes an early screening test and intervention program for young children exhibiting signs of confusion in reading and writing. The Middle Infant Screening Test is used in the fourth or fifth term at school, can be group administered, and provides information for determining whether children would benefit from a follow-up program. Children with special needs can benefit from later screening and intervention in years 2–4. Experience in 14 schools in Britain and Northern Ireland has shown the benefits of Forward Together, a structured 8-week intervention program that works with parents and their children in the home. The program teaches reading, handwriting, free writing, and phonics skills. The screening test and intervention program are described and a case study presented illustrating the process.

Grogan, S.C. (1995, February). Which cognitive abilities at age four are the best predictors of reading ability at age seven? *Journal of Research in Reading*, *18*, 24–31.

Investigates the relation between cognitive abilities at age 4 and reading at age 7, partialling out the effects of intelligence to investigate the relative predictive power of each skill in relation to reading ability. All pupils in the West Midlands (England) primary school were individually tested on a battery of psychometric tests within 2 weeks of school entry. Among the tests in the battery were the Goodenough Draw-a-Man Test, vocabulary scale, copying name, visual memory, auditory sequential memory, sound discrimination, and grapheme/phoneme correspondence. All pupils were nonreaders upon entering school, as defined by the Schonell Graded Word Reading Test. The children ranged in age from 4.1 to 5.0 years. Each was instructed in reading with an eclectic approach that included language experience, phonics, and whole words. All 51 children who remained in the school were retested 2 years and 9 months later; group reading tests were administered at that time. Reading ability was significantly and positively correlated with knowledge of grapheme-phoneme correspondence, visual memory, auditory sequential memory, and draw-a-man scores (intelligence). Once age (2%) and intelligence (12%) were partialled out, auditory sequential

memory scores at age 4 accounted for 13% of the variance in reading scores, with visual sequential memory scores predicting a further 5%.

DUFFELMEYER, FREDERICK A.; KRUSE, ANNE E.; MERKLEY, DONNA J.; & FYFE, STEPHEN A. (1994). Further validation and enhancement of the Names Test. *The Reading Teacher, 48*, 118–128.

Describes procedures used to validate and enhance the usability of the Names Test, an individually administered assessment of a pupil's decoding processes. Increasing the numbers of examples in each of the five phonics categories of the original instrument to a minimum of 15 items yielded a KR 20 reliability coefficient of .93. Validating the instrument through additional studies of between-grade-level variation by allowing time for reading the names (automaticity), and by comparing pupil performance on the test with pupil scores on the reading subtest of the ITBS, suggested that the enhanced version of the Names Test was a good predictor of phonics performance. The developers suggest that a protocol sheet and a scoring matrix developed as part of the validation study make it easier to compare pupil pronunciations with the stimulus words, therefore identifying the elements that may be difficult for the child and increasing the usability of the instrument.

EAVES, RONALD C.; WILLIAMS, PHYLLIS; WINCHESTER, KATHERINE; & DARCH, CRAIG. (1994, October). Using teacher judgment and IQ to estimate reading and mathematics achievement in a remedial-reading program. *Psychology in the Schools, 31*, 261–272.

Investigates the relative merits of using teacher judgment and the Slosson Full-Range Intelligence Tests (SFRIT) to estimate the math and reading achievement of pupils in a summer remedial reading program. Included as subjects were 17 LD children and 28 children considered at risk; grade levels ranged from kindergarten to sixth. Prior to attending the summer clinic, children were administered the SFRIT, the KeyMath–Revised (KMR), and the Woodcock Reading Mastery Tests–Revised (WRMT-R). At the end of the 5-week clinic, each subject's teacher was asked to rate each child's cognitive, mathematics, and reading achievement on a 53-item 5-point Likert scale. Validity coefficients obtained between teacher judgments and the standard scores on the tests ranged from .38 to .53 for the SFRIT, .38 to .54 with the KMR, and .22 to .46 with the WRMRT-R. SFRIT–KMR coefficients of correlation ranged from .62 to .85; coefficients between the SFRIT and WRMT-R ranged from .44 to .73.

POWERS, DONALD E., & LEUNG, SUSAN WILSON. (1995, Summer). Answering the new SAT reading comprehension questions without the passages. *Journal of Educational Measurement, 32*, 105–129.

Attempts to determine ways in which students obtain information from the kinds of comprehension questions used on the revised Scholastic Assessment Test (SAT) without reading the passages. Six passages and questions were selected from among items pretested in earlier trials of the revised SAT. From these, 3 different test forms were assembled, each consisting of 18 questions from 2 of the 6 passages. Test questions, along with a checklist of possible strategies used, were administered to 350 high school juniors from 8 schools. Participants were selected because they scored, on average, 1 standard deviation higher than SAT takers in general and had more often taken honors English courses and maintained higher grade-point averages than did all college-bound seniors. For each of the 6 sets of questions, performance was better than would be expected from random guessing (20%); for 3 of the sets, the percentage of correct responses was from 26% to 29%; for 2 sets, the percentage was 37% and 38%; and one set of 5 questions gave a 59% mean correct percentage. The checklist of strategies required participants to indicate on a 5-point scale the proportion of questions for which

they had used a strategy. Choosing an answer because it seemed to be consistent with something stated in the other questions was reported as used by 65% of participants for 75% or more of the questions. Another frequently checked strategy was reconstructing the main theme of a missing passage from all the questions and answers in a set. Personal knowledge or experience was checked by 20% of students as being used for 75% or more of the questions.

KING, BRUCE W.; RASOOL, JOAN A.; & JUDGE, JOHN J. (1994, Fall). The relationship between college performance and basic skills assessment using SAT scores, the Nelson Denny Reading Test and Degrees of Reading Power. *Research and Teaching in Developmental Education, 11*, 5–13.

Determines the relation between grades in mathematics and reading and class standing, age, and SAT performance. Participants were 454 recently accepted college freshman at a western Massachusetts public college. Students took either the NDRT or the DRP during the orientation sessions held in August of their freshman year. Students who disclosed documented learning disabilities were eliminated from the sample population for the study. Subjects' calculated average for all intensive reading courses in the core curriculum and final grade performance in required nonremedial mathematics courses were compiled as measures of success. Noted for the remaining population were students' verbal and math SAT scores and other possible predictor variables such as class standing, gender, age, and transfer activity. Logistic and multiple regression analyses applied to the data revealed the math SAT score to be the only significant predictor of success; though success was specific to performance in mathematics only. Neither the verbal SAT score nor the reading skills test data exhibited any relation to student success during the college experience.

HALL, CHRISTINE K., & LEIST, CATHY WADE. (1994). Alternate assessment of reading comprehension: An evaluation checklist for summary writing. In Alice M. Scales & Bernice G. Brown (Eds.), *Innovative learning strategies: Eleventh yearbook* (pp. 69–75). Pittsburgh, PA: College Reading Improvement Special Interest Group, International Reading Association.

Presents a checklist for evaluating written summaries of college students. In response to traditional standardized tests for placement in developmental reading courses, the researchers designed an alternative assessment procedure that mirrors tasks performed in college studies. Students are given an excerpt from a college freshman textbook and asked to summarize the selection. They are allowed to mark the text and refer back to the selection. A checklist for assessing the summaries was developed based on a model for evaluating retelling and was field tested and revised. The summary responses of 185 students enrolled in 3 sequential levels of developmental reading and study skills courses were analyzed with the checklist. The checklist uses a multiple-choice format to enable computer scoring and a protocol for holistic scoring. Both the checklist and protocol for holistic scoring are provided in the appendix.

HORTON, STEVEN V., & LOVITT, THOMAS C. (1994, November). A comparison of two methods of administering group reading inventories to diverse learners. *Remedial and Special Education, 15*, 378–390.

Investigates the diagnostic information gained from two methods, one computer based and one a traditional paper and pencil approach, of matching learners to textbooks to determine (1) what level of agreement existed for placing students in teacher-directed, dyadic, or independent instructional groups; (2) if results were consistent for both social studies and science fields and for middle school and high school students; and (3) if students have a preference for or find information easier to read when presented in a textbook or on a computer screen. Students, 38 males and 34 females, were enrolled in science and social studies

classes at middle and high schools. In the experimental condition, 13 students were identified as having learning disabilities, 16 were enrolled in remedial programs, and 43 were described as normally achieving. All subjects read passages, completed study guides for the main ideas of the texts, and took teacher-developed 15-item tests on the main ideas of the passages. An equivalent time samples design was used, with the two types of assessments randomly assigned four times each to all experimental and control groups. Scores on factual questions slightly favored the computer groups. On interpretive test items, no significant differences were found. Placement of students in the three instructional groups was identical for each type of reading inventory in 72% of the individual comparisons. Teachers and students reported preferring administration by the computer, although student responses were not consistent across grade level or subject.

DONOGHUE, JOHN R. (1994, Winter). An empirical examination of the IRT information of polytomously scored reading items under the generalized partial credit model. *Journal of Educational Measurement, 31*, 295–311.

Calibrates polytomous items from the 1991 field test of the NAEP Reading Assessment with multiple-choice and short open-ended items using a generalized partial credit IRT model. Four-category polytomous items yielded 2.1 to 3.1 times as much IRT information as did dichotomous items. The researcher concludes that results provide limited support for the ad hoc rule of weighting k-category polytomous items the same as k-1 dichotomous items for computing total scores. Polytomous items provided the most information about examinees of moderately high function, with information function peaking at 1.0 to 1.5. When scored dichotomously, information in polytomous items sharply decreased, but more information was provided than with other response formats. A derivation of the information function for the generalized partial credit model is included.

V–13 Technology and reading instruction

DURRANT, CAL, & HARGREAVES, SANDRA. (1995, April). Literacy online: The use of computers in the secondary classroom. *English in Australia, 3*, 37–48.

Describes findings of a national survey conducted in Australia on how English teachers are using computers in their classrooms. Although much of the survey is specific to English instruction, some of the items are of particular interest to reading research. The number of respondents is not reported, but responses are presented throughout as percentages. The largest percentage (92%) reported using computers in the preparation of class materials, with 84% using them for word processing, 72% for editing student writing, 28% for teaching literature texts, and 12% for spelling instruction. More than one third of respondents felt that computers increased student output a lot or a great deal, and a majority checked that the use of computers improved students' spelling at least some, with 83% indicating that computers did not have a negative effect on student spelling. Only 5% of respondents reported communicating with other English professionals via electronic mail. The majority checked that the future of computers in the teaching of literary texts would be in the use of CD-ROM and electronic books.

MACARTHUR, CHARLES A., & HAYNES, JACQUELINE B. (1995, March). Student assistant for learning from text (SALT): A hypermedia reading aid. *Journal of Learning Disabilities, 28*, 150–159.

Evaluates the effectiveness of SALT, a hypermedia reading aid, in improving the independent comprehension of materials from a science textbook by 10 students, aged 15 to 17, who were identified as having learning disabilities. Two versions of computer presentation of

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text were compared. One version included the text, graphics, and questions found in the original textbook, and an enhanced version included all of the elements of the basic version as well as speech synthesis, an on-line glossary, links between questions and texts, highlighting capabilities, and supplementary explanations. All students read one passage with the basic version of the program and another passage with the enhanced version. Students then completed short answer and matching format questions about the materials read. All students participated in an individual interview to assess overall opinions about the SALT program, as well as opinions about specific SALT features. They also evaluated how helpful they felt each special feature was to their learning and whether the feature should be included in a final version of the computer program. Of the 10 students, 9 scored higher on the test following the use of the enhanced version. Overall reactions to the program were positive, with students saying they thought the program helped them learn the content better than they had learned from the textbook. All students except one preferred the enhanced version to the basic version. Features found especially helpful were highlighting main ideas, linking questions to the text, linking graphics to the text, and the notebook.

LUNDBERG, INGVAR. (1995, Spring). The computer as a tool of remediation in the education of students with reading disabilities—a theory-based approach. *Learning Disabilities Quarterly, 18*, 89–99.

Describes the basic operations of the "talking computer" and reviews several studies exploring its effects as a remedial tool for dyslexics. Various programs designed to help dyslexics establish phonemic awareness, either in isolation or in context, are described. The studies are generally supportive of "talking computer" technology as it is used in the treatment of dyslexia.

FEY, MARION. (1994). Transforming the literacy classroom through reader response and computer networking. In Charles K. Kinzer & Donald J. Leu (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (pp. 296–305). Chicago, IL: National Reading Conference.

Considers how a computer networking culture can contribute to the development of literacy. Data were derived from a class of 14 adult students, between 25 and 48 years of age, all employed and attending a nontraditional college for adults. None had experienced distance instruction through computer networking prior to the study. The distance learning course was a composition course that integrated writing with reader response. Students participated in small peer-response groups and whole group discussions through the computer. Each member prepared response writings for reading and transmitted them to special locations. The class did not meet face to face as a group until the course ended. All students, except 1, had easy access to the computer through home or work. Transcriptions of discussions, response writings, electronic mail, field notes, and interviews with select students served as data sources. Coding, categorization, and member checking were the qualitative methods employed. Although computer networking freed up time and space, it complicated communication by the lack of support from physical contact. Because students were required to give attention to the language they used in order to be understood, the computer network facilitated an expansion and development of thinking by forcing students to read and write carefully. A case study is presented to illustrate the positive effects of the computer networking experience.

LAMBERT, JANET. (1994, Summer). Distance learning comes to Illinois: A successful beginning. *Illinois Reading Council Journal, 22*, 17–20.

Reports the results of a 2-week, 10-hour instructional program on vocabulary and comprehension skills delivered to inmates in the Taylorville Correctional Facility, Illinois, through interactive video. Inmates were pretested using the Wilson Essential Word List and the Miller Oral Reading Paragraphs. Reading abilities of the 16 students ranged from nonreader to ap-

proximately sixth grade based on the oral reading paragraphs. The newspaper was the main instructional material. Each distance learning lesson reviewed the preceding day's skill lesson, vocabulary lesson, and the inmates' homework before providing the new word recognition and vocabulary instruction. Echo reading, paired reading, partner reading, and silent reading were encouraged as practice. A total of 640 new words were taught. Each student was posttested individually. Mean score on 14 of the inmates who completed the course was 497 words and median was 570. Most inmates reported a positive response to instruction.

ANDERSON, JIM, & LEE, ANDREA. (1995, Spring). Literacy teachers learning a new literacy: A study of the use of electronic mail in a reading education class. *Reading Research and Instruction, 34*, 222–238.

Investigates the use of electronic mail (e-mail) as an instructional tool in a graduate studies reading course. As one of the assignments in the 3-week class, participants were required to use e-mail to circulate an outline of a seminar session. Neither students nor the instructor were familiar with the use of e-mail. At the end of the semester, all e-mail messages were sorted and categorized under themes. Examples of e-mail messages appear under the theme headings of community building, requests for help or sharing, pedagogy, recursion and reflection, and risk taking. The discussion points out the problems involved, including the lack of terminals dedicated to the project and the level of support needed. The authors note that the study demonstrated that e-mail has potential for teaching and learning at the university level. The caveat is expressed that individual students responded differently to e-mail and that it cannot be viewed as a panacea. A list of suggestions for the use of e-mail in a course is offered.

VAN DYKE, JANICE. (1993). Television and middle school reading. In Philip H. Dreyer (Ed.), *Learning from learners: Fifty-seventh yearbook of the Claremont Reading Conference* (pp. 140–150). Claremont, CA: Claremont Graduate School.

Determines the associations between the amount of time spent viewing TV, reading, and doing homework, and reading comprehension stanines and reading grades. Subjects ($n = 28$) were selected from 3 middle school classrooms (2 sixth grade, 1 seventh grade) across 3 schools and classified as better ($n = 14$) or less able ($n = 14$) readers. Pupils were asked to recall and record the previous day's activities regarding TV viewing, leisure reading, and other leisure activities occurring after school until bedtime. These leisure time logs were completed in the classroom and were guided by directions from the classroom teachers for 4 weeks. Correlation coefficients were computed for association between amount of time spent watching TV and time spent on other activities. One-way ANOVA determined differences among various activities between better and less able readers. An inverse association was found between (1) amount of time spent watching TV and the amount of time spent reading and/or doing homework, and (2) reading comprehension stanines and the number of TV sets in the home. Children who had more TV sets in their homes had lower comprehension scores. No significant associations were found between the amount of time spent watching television, reading, and doing homework, and reading comprehension stanines or grades.

VI. Reading of Atypical Learners

VI–1 Visually impaired

SHARPE, M.; MCNEAR, D.; & BOSMA, J. (1995, January). The development of a scale to facilitate reading mode decisions. *Journal of Visual Impairment & Blindness, 89*, 83–89.

Describes the first phase of a project to develop an empirically based scale to help multidisciplinary teams decide whether individual children need to start or continue braille instruction. A survey was sent to 600 practitioners and trainers who were members of the Elementary and Secondary Curriculum Divisions of the Association for Education and Rehabilitation of the Blind and Visually Impaired. In addition to demographic information, the survey included 113 items to be rated as variables that could serve as indicators of the appropriateness of braille instruction. A principal components factor analysis was conducted on the 217 returns and five general factors identified: tactile orientation, visual orientation, object recognition skills, basic vision level, and cognitive-physical ability. A second version of the inventory, with 48 indicators, was then developed. This form was sent to be rated by professionals in the field for additional refinement. Data were obtained from 225 surveys returned and analyzed. A second phase of the study will determine reliability, validity, and usefulness to the field of the instrument.

KOENIG, A.J.; LAYTON, C.A.; & ROSS, D.B. (1992, January). The relative effectiveness of reading in large print and with low vision devices for students with low vision. *Journal of Visual Impairment & Blindness*, *86*, 48–53.

Compares individual subjects' reading with low-vision devices to reading in large print without low-vision devices. Data were collected on four reading behaviors: oral reading rate, silent reading rate, working distance, and oral reading miscues. Subjects were six students with low vision who were enrolled in integrated elementary, junior high, or high school programs, all with experience and competence in reading with either an optical or electronic low-vision device. A case study format was used with each subject. Testing occurred individually over a 2-day period. Approximate instructional reading level was obtained on the first day and was used to select stories for oral reading. In addition, the reading comprehension subtest of the Brigance Diagnostic Comprehensive Inventory of Basic Skills was administered in large print as a measure of silent reading rate, and a 20-minute oral reading sample in large print was audiotaped. On the second day, the same procedures were repeated with regular print and low-vision devices. Working distance was determined and oral reading miscues analyzed. Profiles were quantitatively analyzed for each student to note the presence of educationally significant differences in reading behaviors between the two media. Results of the case studies point out the unique characteristics of individuals with visual impairments. Because of the complexities found when examining the reading behaviors of the six subjects, it was felt that no generalizations about reading media were possible; rather, decisions relative to individual students need to be made on an individual basis.

WENSVEEN, JANICE M.; BEDELL, HAROLD E.; & LOSHIN, DAVID S. (1995, February). Reading rates with artificial central scotomata with and without spatial remapping of print. *Optometry and Vision Science*, *72*, 100–114.

Assesses the feasibility of using spatial remapping of text to increase the reading rate of individuals with central field defects resulting from age-related macular degeneration (ARMD). Subjects were four college students and six retirees of the same age group as typical patients with ARMD. All had visual acuity in the right eye of 20/30 or better. Central field loss due to ARMD was simulated in the right eye in the three experiments reported. Oral reading rates for unrelated sequences of 3-, 4-, 5-, and 6-letter words were determined by increasing the number of character spaces seen after each stationary presentation. Print speed was increased until the reading became difficult. The procedure mimicked the sequence of retinal images produced during the saccades and fixations of normal reading but without requiring subjects to make accurate eye movements. Number of correct words was determined, and maximum reading rates for each age group were computed by averaging individual maximal

reading rates within each group. In Experiments 1 and 2, artificial scotomata of 2, 4, and 8 diameters were constructed from opaque gray film cut in circles and fixed to the center of the computer screen on which the target words appeared. For Experiment 3, scotomata were produced electronically on the computer screen. Scotomata simulated were intended to mimic those found in ARMD. In Experiment 1 the main effects and interactive effects of scotomata size and letter size on reading rate were investigated. In Experiment 2 the effect of presentation duration was researched. Experiment 3 showed the effect of spatial remapping in which print obscured by the scotoma was stretched electronically to reappear at the scotoma margin. Across experiments, average reading rates were faster for the younger subjects than for the older age group. In Experiment 1, letter size yielding the optimal rate was found to increase systematically with scotoma size. However, optimal rate decreased somewhat linearly as the scotoma size increased. Results of Experiment 2 revealed that the optimal reading rate was obtained for essentially the same duration of text presentation, regardless of scotoma size. In Experiment 3, spatial remapping produced small but significant increases in reading rate for both 4 and 8 scotomata.

TAKUDA, KATSUMI. (1993, October). Performance effects on the views of nonhandicapped subjects on the ability of the blind. *Science of Reading*, *37*, 91.

Investigates the relation between sighted subjects' impression of reading braille and their beliefs about the abilities of the blind. The 118 sighted university students were asked first to respond to a pretest questionnaire assessing their views on the abilities of the blind. Then they were given 1 hour of instruction in reading 25 Hiragana in braille with their eyes closed, followed by a 10-minute lecture on the history and system of braille. A braille reading test was administered along with the questionnaire posttest. Using the results of the braille reading test, subjects were divided into three performance level groups. Subjects in the low-performance group tended to change their views to indicate that the blind did have special abilities, but subjects in the high-performance group concluded that the blind did not possess special abilities.

BULLIMORE, MARK A., & BAILEY, IAN L. (1995, February). Reading and eye movements in age-related maculopathy. *Optometry and Vision Science*, *72*, 125–138.

Monitors eye movement patterns of subjects with age-related maculopathy (ARM). Studied were 13 ARM patients, ages 62 to 96, whose visual acuity ranged from 20/40 to 20/320; patients had no significant eye disease other than ARM. Six normally sighted adults, ages 62 to 77, were also tested. Eye movements were monitored while subjects read two kinds of charts, one consisting of unrelated words and one consisting of continuous text. Both charts contained a wide range of print size. Subjects began reading at the top of a chart and continued until they reached their smallest resolvable print size. Normal subjects read silently; ARM patients read orally. In addition to the two charts, subjects were tested for visual acuity for gratings, letters, and words; contrast sensitivity for grating and edge targets; and visual fields. Luminance levels were controlled by filters or by rheostat control of incandescent lamps. ARM patients showed similar fixations rates to normals, but they averaged fewer letters per forward saccade and made more frequent regressions. Their reading performance was more likely to be affected by luminance. The authors propose that reduced reading performance by ARM patients is primarily the result of a reduced perceptual span, with poor oculomotor control playing a secondary role. Optimal print size is best predicted from letter chart acuity or word reading acuity. Word reading acuity is the best predictor of peak reading speed (n = .74); peak reading speed was poorly correlated with contrast sensitivity (r = .26) and scotoma area (r = .42).

VI–2 Hearing impaired

SCHIRMER, BARBARA R. (1995, Spring). Mental imagery and the reading comprehension of deaf children. *Reading Research and Instruction, 34*, 177–188.

Proposes a study to determine whether mental imagery can be used as a metacognitive reading comprehension strategy by elementary level deaf children. Participants were 9 children, ranging in age from 7.2 to 11.8; 6 were diagnosed with profound hearing losses, 1 with a severe-to-profound loss, and 2 with severe hearing losses. Children were divided into four reading groups based on grade level groupings. Each group met with the researcher once weekly for 30 to 45 minutes for 8 weeks. Each group read and discussed one short story a week for the final 7 weeks. For three meetings, stories were taught following a DRTA format; on the following 4 weeks, children were asked to form mental images of what they read and to retell the story. Findings indicated that children used mental imagery, but that traditional means of assessing comprehension did not detect differences in how children reflected on text with and without imagery. However, a qualitative analysis revealed that the use of mental imagery appeared to encourage four qualities of thinking: recollection, representation, inference, and evaluation.

KELLY, LEONARD P. (1995, February). Processing of bottom-up and top-down information by skilled and average deaf readers and implications for whole language instruction. *Exceptional Children, 61*, 318–334.

Compares skilled and average deaf readers on indicators of bottom-up and top-down processing. Subjects were 9 skilled readers and 9 average readers enrolled at a metropolitan secondary school for the deaf. Reading ability was determined by scores on the SAT–Hearing Impaired Edition. Students were asked to read 30 8-sentence passages displayed one word at a time on a computer monitor. Sixteen of the passages were designed to be on familiar topics, 14 on unfamiliar topics. Two of the last 6 sentences in each paragraph were designated as target sentences, each being read under either an interrupted or continuous condition. Interrupted sentences involved a distractor task. Following the reading of the passage, students responded to 4 true or false comprehension questions. Measures of bottom-up fluency—reading time for words and stability of word-to-word reading time—indicated that skilled readers were more fluent than average readers. No significant interaction was found between any of the three measures of top-down processing and ability group, suggesting that neither group was engaging in these processes more than the other. The findings supported the conclusion that both skilled and average readers used a number of productive top-down reading processes.

ARNOLD, PAUL, & HORNER, LOUISE. (1995, Summer). Word comprehension by hearing-impaired and hearing children. *Educational Research, 37*, 185–202.

Compares performance of hearing-impaired and normal hearing children on the Picture Aided Reading Test (PART) and a saliency test. Subjects included 14 hearing-impaired children, ages 5.1 to 15.6 years, each matched with a hearing peer on the basis of age, IQ, sex, and social background. The PART consists of 60 stimulus words (35 nouns, 9 adjectives, and 16 verbs), which become progressively more difficult. Each word appears on a page followed by a page with four pictures, one of which illustrates the stimulus word. The picture saliency test asked the child to select from each set of four pictures the one that the child felt most interesting, nice, or exciting. A two-way ANOVA indicated that hearing children had a significant higher score on the PART. The saliency test showed no differences between the two groups. The findings refuted an earlier study that claimed that hearing-impaired children's performance on some items of the PART was a function of a nonreading strategy involving the selection of the visually most salient pictures.

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VI–3 Mentally handicapped

CAWLEY, JOHN F., & PARMAR, RENE S. (1995, June). Comparisons in reading and reading-related tasks among students with average intellectual ability and students with mild mental retardation. *Education and Training in Mental Retardation and Developmental Disabilities*, *30*, 118–129.

Examines and compares the reading performance of four groups of children in the areas of reading, cognitive attention, language performance, and learning rate. Subjects were 80 children with mild mental retardation and 80 children of average intellectual ability. Participants were matched on the basis of mental age. Within each group, half were identified as good readers and half as poor readers. Reading performance was assessed by means of subtests of the Gates-McKillop Reading Diagnostic Test. The Embedded Figures Test, the Detroit Test of Learning Aptitude, and various language measures were administered also. No consistent pattern of statistically significant differences was noted between the reading of children of average ability and the reading of mildly retarded children matched for mental age. The findings indicate that differences between good and poor readers of average intellectual ability and between good and poor mildly retarded readers are relatively consistent.

ACKERMAN, PEGGY T.; DYKMAN, ROSCOE A.; OGLESBY, D. MICHAEL; & NEWTON, JOSEPH E.O. (1994, December). EEG power spectra of children with dyslexia, slow learners, and normally reading children with ADD during verbal processing. *Journal of Learning Disabilities*, *27*, 619–630.

Studies EEG power spectra in 2 poor reader groups (dyslexic and slow learning) and a normally reading clinic control group with attention deficit disorder (ADD). Subjects included 119 children, ages 7.5 to 12 years, who had been referred for psychoeducational evaluation and met the clinical criteria for diagnoses of developmental reading disorder, attention-deficit or hyperactivity disorder or both. Using scores on the WISC-R and the WRAT-R, subjects were assigned to 3 groups: dyslexia, slow learning/borderline, or ADD. ADD children (n = 56) were average or better readers and spellers, and the other 2 groups included below-average readers. Dyslexics (n = 42) had full scale IQs at least 17 points higher than their reading/spelling averages. Slow learners (n = 21) had less than a 17-point difference between IQ and reading/spelling scores. Children were administered a reading battery consisting of the WRMT-R the GORT-R, and Part II of the Decoding Skills Test. Parents completed a child behavior checklist and were asked the ADD questions from the Diagnostic Interview for Children—Parent Version; teachers completed a questionnaire including items about overactivity, inattention, and aggression. Following a battery of tests designed to identify dysfunctional processes associated with poor reading, electrodes were attached to children for 3 EEG procedures. In the third of these procedures, children viewed and read silently 5 types of word strings and 2 types of letter strings on a color monitor screen. EEG was recorded from frontal, central, parietal, and occipital sites and from the bilateral temporal and parietal sites. The major difference among groups was in the low-beta band where the ADD group had greater power at the parietal and midline sites. The slow learner group had marginally greater beta at the left than right temporal site, with the opposite trend identified for the dyslexic and ADD groups. Across groups, power was greater at the right than at the left parietal site in the delta and alpha bands and at the right than at the left temporal site in the low-beta band. Using correlational analyses, it was found that the combination of greater low beta and less theta power significantly predicted better reading and spelling. Findings indicated that better readers processed stimuli more actively than did the poorer readers.

COLLINS, BELVA C.; BRANSON, TERRI A.; & HALL, MEADA. (1995, March). Teaching generalized reading of cooking product labels to adolescents with mental disabili-

ties through the use of key words taught by peer tutors. *Education and Training in Mental Retardation, 30,* 65–76.

Assesses the ability of adolescents with moderate mental disabilities to learn to read key words from labels of cooking products using a constant time delay procedure (CTD). Participants were 4 rural high school students in a self-contained special education class and whose IQs ranged from 36 to 57; 26 students in an 11th-grade advanced English class served as peer tutors. Names of two product brands from three cooking product categories were used as materials. Target words appeared on the product labels. Peer tutors conducted three one-to-one probe sessions for each tutee prior to and following the training of each set of cooking products. Each probe session contained two trials on each target word across the three types of products. For the CTD procedure, target words were presented in random order with two product brands per training tier. One trial was presented per target word per brand. The peer tutor praised on a continuous reinforcement schedule until a criterion of 100% correct independent responses for one session was met, at which time a lowered praise schedule was introduced. Generalization probes were carried out by the classroom teacher using a novel product brand during a cooking activity. Findings showed an increase from pre- to postintervention generalization probes in the ability to read and define target words from a novel product label.

FAWCETT, ANGELA J., & NICOLSON, RODERICK I. (1994, December). Naming speed in children with dyslexia. *Journal of Learning Disabilities, 27,* 641–646.

Assesses the naming speed reaction time of seven groups of children: three groups with dyslexia with mean ages 8, 13, and 17 years (n = 13, 10, 12); three groups of normally achieving children matched for age and IQ with the dyslexic groups; and a group of 10-year-old slow learners (n = 10) matched for reading age (RA) with the youngest dyslexic group. WISC-R IQs of the slow learning group ranged from 68 to 83. Four tests were administered: object, color, digit, and letter naming. Stimuli were presented on a computer screen and subjects instructed to name the stimulus as quickly as possible. Dyslexic children performed significantly slower than their chronological age controls on all four tasks. When compared with RA controls, dyslexics' performance was not significantly different for three of the tasks but was significantly slower for picture naming. Speed of naming increased significantly with age. Performance of the 17-year-old dyslexics was closest to that of the 8-year-old controls. Performance of the slow learners was equivalent to that of the youngest children with dyslexia.

KENNEDY, CRAIG H.; ITKONEN, TIINA; & LINDQUIST, KRISTIN. (1994, Winter). Nodality effects during equivalence class formation: An extension to sight-word reading and concept development. *Journal of Applied Behavior Analysis, 27,* 673–683.

Presents findings based on three students with moderate disabilities who were taught to read and match-to-sample sight words comprising stimulus sets based on four food groups. Students were aged 17, 19, and 21 years and ranged in IQ from 47 to 59. They were identified as having educational objectives related to sight-word reading, meal planning, and food-group identification. Students were taught conditional discriminations in four 4-member sets using a single-sample four-comparison procedure. Taught were A-B, B-C, and C-D conditional discriminations for each of the four potential stimulus classes. Subsequent probes assessed relations based on symmetry and 1-node and 2-node transivity. Performance indicated that symmetric relations emerged before 1-node transitive relations, with 1-node transitive relations emerging before 2-node transitive relations. Results are consistent with a nodality effect pattern in which relations with fewer nodes are demonstrated prior to relations with a larger number of nodes.

VI–4 Neurologically impaired and brain injured

RADHAKRISHNAN, KURUPATH; SILBERT, PETER L.; & KLASS, DONALD W. (1995, February). Reading epilepsy: An appraisal of 20 patients diagnosed at the Mayo Clinic, Rochester, Minnesota, between 1949 and 1989, and delineation of the epileptic syndrome. *Brain*, *118*, 75–89.

Documents the clinical and EEG findings of 20 patients with reading epilepsy (RE). Of these patients, 16 were followed for more than 10 years. Age at onset of RE ranged from 10 to 46 years. RE is a rare syndrome with two reported types: primary reading epilepsy and secondary reading epilepsy. In primary RE, seizures occur only in relation to reading; in secondary RE, seizures also occur under conditions where reading is not the sole stimulus. Demographic, clinical, and EEG data were collected through a review of medical records. Myoclonic jerks, involving orofacial and jaw muscles, developed after a certain amount of reading in all but 1 patient. The type of material read and how it was read did not appear to be factors in the seizures. Precipitating factors other than reading, involving linguistic or nonlinguistic higher cognitive processes, were found in 9 patients. Spontaneous myoclonus affecting the upper extremities, especially in the morning, indicated co-occurrence of juvenile myoclonic epilepsy (JME) in 4 patients; interictal EEG abnormalities were found in 12. Of 11 patients still living, only 3 were symptom free without anticonvulsant medication. The authors propose a classification for higher cognitive function-related epilepsies for RE, in particular, to explain the electrographic heterogeneity and clinical overlap observed between RE and JME. Suggested is a hypothetical model to explain the ictogenesis and to encompass the electroclinical heterogeneity in RE.

DE BLESER, R.; REUL, J.; KOTLAREK, F.; FAISS, C.; & SCHWARTZ, M. (1994, October). Rapid recovery of aphasia and deep dyslexia after extensive left-hemisphere damage in childhood. *Brain and Language*, *47*, 474–476.

Reports a case of acquired language impairment following a stroke with extensive left-hemisphere damage in an 8-year-old Dutch-speaking Belgian boy. Language was examined informally during the first and second weeks post onset. Reading aloud was seriously defective and he frequently produced words that were semantically but not phonologically similar to the target. The patient was reexamined at 3 weeks post onset while still in the hospital and again after discharge at 1.5 and 3.5 months post onset. Processing of spoken and written words showed rapid recovery; phonemic impairments of spoken language observed early on had completely recovered by the third session. Also at this time, systematic impairments of spoken or written language were no longer present except for somewhat limited spontaneous speech.

KERSHNER, JOHN; KIRKPATRICK, TERRY; & MCLAREN, DANA. (1995, February). The career success of an adult with a learning disability: A psychosocial study of amnesic-semantic aphasia. *Journal of Learning Disabilities*, *28*, 121–126.

Reports the case study of an intellectually gifted 39-year-old male who had overcome a serious learning disability and had achieved success in business. Following a battery of tests, the patient was diagnosed as suffering from amnesic-semantic aphasia. He displayed such symptoms as a disturbed understanding of the complex grammatical constructions of speech, dysfluent speech and writing, reading disability, visual-spatial confusion, and poor auditory memory. He demonstrated an impairment in episodic, long-term memory with relatively intact short-term memory, and an impairment in the comprehension of syntax with spared syntactic expression and comprehension of the lexicon. He had fashioned a buffered physical and social environment for himself. His awareness of his limitations and his ability to control his environment permitted him to achieve in business.

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PLAUT, DAVID C., & SHALLICE, TIM. (1993). Deep dyslexia: A case study of connectionist neuropsychology. *Cognitive Neuropsychology, 10*(5), 377–500.

Gives a brief overview of the development of the concept of deep dyslexia, reviews relevant literature, and proposes and discusses implications for the validity of the concept as a syndrome. Deep dyslexia was first described in a single patient in the 1960s as an acquired reading disorder marked by semantic errors. Patients also exhibit other symptoms, including visual and morphological effects in their errors, a part-of-speech effect, and a preference for concrete over abstract words. The construct poses a challenge for cognitive neuropsychology because there has been little understanding of why such a variety of symptoms co-occur in patients. The authors evaluate and attempt to improve on an earlier work that replicated the co-occurrence of visual and semantic errors by lesioning a recurrent connectionist network trained to map from orthography to semantics. Identified are four properties of networks that underlie the ability to reproduce the deep dyslexic symptom complex: distributed orthographic and semantic representations, gradient descent learning, attractors for word meanings, and greater richness of concrete versus abstract semantics. Of these, the first three are connectionist principles, and the fourth is based on earlier theorizing. When taken together, the results tend to demonstrate the usefulness of a connectionist approach to understanding deep dyslexia.

KLEIN, DENISE; BEHRMANN, MARLENE; & DOCTOR, ESTELLE. (1994). The evolution of deep dyslexia: Evidence for the spontaneous recovery of the semantic reading route. *Cognitive Neuropsychology, 11*(5), 579–611.

Presents evidence from a deep dyslexic patient who demonstrated a longitudinal pattern consistent with recovery of semantic reading independent of significant change in sublexical processing. The patient, a 27-year-old male, was involved in a car accident. Following the accident he was placed on a ventilator for 25 days and gradually regained consciousness; 39 days after the accident, he started speaking. Testing indicated a reading deficit consistent with a pattern of deep dyslexia. He demonstrated significant recovery in his reading without having any therapeutic intervention. At 18 months post onset, he no longer produced any purely semantic errors or showed effects of imageability or part-of-speech on his oral reading. However, his ability to read nonwords had not improved significantly. The findings are interpreted as suggesting that selective and spontaneous recovery of the semantic reading route can occur independently of a significant change in the sublexical reading route.

SEKI, KEIKO; YAJIMA, MARIKO; & SUGISHITA, MORIHIRO. (1995, May). The efficacy of kinesthetic reading treatment for pure alexia. *Neuropsychologia, 33*, 595–609.

Employs a single-case design to demonstrate the efficacy of a kinesthetic approach to teaching two adult alexic males to read. Materials used with subjects were divided randomly into two groups, each of which was used as treatment with one subject and served as control in the other. Stimuli employed were the same 30 ideogram letters for both patients and 30 phonograms for one patient. Letters were randomly divided into two 15-letter sets. One letter set was used as control and the other as the kinesthetic reading treatment. Patients' reading performances were evaluated before and after each treatment. Results demonstrated the effectiveness of the kinesthetic reading treatment inasmuch as both improved reading of treated letters but did not improve reading of untreated letters.

MICELI, GABRIELE; CAPASSO, RITA; & CARAMAZZA, ALFONSO. (1994, October). The role of the graphemic buffer in reading and spelling. *Brain and Language, 47*, 488–490.

Asks whether a common graphemic buffer is involved in reading and spelling or whether the buffer for reading is distinct from the buffer used for spelling. An Italian dysgraphic patient's reading performance was analyzed. He correctly read 93% of words, 54% of morphological nonwords, and 33% of nonwords without morphological structure. The letters produced incorrectly in nonwords reading were analyzed, of which 32% were substituted, 21% were inserted, 11% were deleted, and 33% were transposed. The findings are interpreted as being incompatible with the hypothesis that errors in nonwords reading are the result of an impairment of orthography-phonology conversion procedures, but are compatible with the hypothesis of damage to the graphemic buffer. The findings seem to support the hypothesis that a common buffer is used in spelling and reading.

CIPOLOTTI, LISA. (1995). Multiple routes for reading words, why not numbers? Evidence from a case of Arabic numeral dyslexia. *Cognitive Neuropsychology, 12*(3), 313–342.

Provides a case study of a 52-year-old male who showed a selective impairment in reading aloud multidigit Arabic numerals but showed a spared ability to read aloud written number names, letters, and words. The clinical diagnosis was probable Alzheimer's disease. The patient was mildly disoriented in time and severely disoriented in place. Neurological examination indicated the presence of difficulties predominantly restricted to memory and visual-constructional functions with a severe impairment of numeracy skills. His speech production and comprehension were intact. He could write spontaneously and from dictation, although he was unable to copy letters, numbers, and words. He showed severe impairments in calculation tasks. Multiplication facts remained relatively well preserved, but he was impaired with single-digit addition and subtraction problems. The numerical skills impairment was felt to be a primary cognitive deficit stemming from the disruption of a specific cognitive system subserving numerical processes. The findings are interpreted as indicating that Arabic numerals and alphabetically written stimuli are read by two processes that appear to be partially dissociable. The patient's performance was thought to be a result of damage to a postulated asemantic route for Arabic numeral reading.

DELAZER, M.; SEMENZA, C.; & DENES, G. (1994, October). Reading Arabic numbers and number words in a dyslexic patient. *Brain and Language, 47*, 437–439.

Presents a brief report on an aphasic patient who had difficulties in reading numbers and number words. The patient was a 46-year-old male who suffered a left cerebrovascular accident 20 months prior to first testing. Auditory comprehension was good. There were frequent errors in number reading. Repetition, writing from dictation, and transcoding from number words to Arabic numbers were preserved for one- and two-digit numbers. He was asked to read orally 416 written words, 406 Arabic numerals, and 302 written number words. Additionally, he performed a lexical decision task, a repetition task, and 15 calculations. His reading of nouns, adjectives, Italian proper names, and compounds was 90% or better, with only 5% of nonwords read correctly. Three-digit numbers were read correctly 15% of the time; two-digit numbers, 63%; and single digits, 80%. In reading number words, one-digit numbers were read correctly 93% of the time; two-digit numbers, 62%; and three-digit numbers, 25%. Errors in reading words were visually based. Errors in reading numbers consisted of other visually unrelated numbers. Number-reading errors did not depend on the type of script and were specific for the semantic class. Semantic elaboration of numbers itself was intact. The patient showed corresponding error patterns in reading number words, in reading Arabic numerals, and in response to calculations.

FRIEDMAN, RHONDA B.; FERGUSON, SARAH; ROBINSON, SUSAN; & SUNDERLAND, TREY. (1992, July). Dissociation of mechanisms of reading in Alzheimer's disease. *Brain and Language*, *43*, 400–413.

Investigates the role of spelling-to-sound correspondence rules in oral word reading of Alzheimer's disease (AD) patients. Subjects included 22 AD patients and 22 age- and education-matched controls. Mean age of the AD group was 70; mean age of controls was 71. Subjects were presented with 7 types of 4- to 6-letter pseudowords for oral reading: 10 regular (only one reasonable pronunciation), 20 homophone (regular but homophonous with real words), 20 high-frequency analogy, 14 low-frequency analogy, 20 inconsistent, 18 conflicting, and 20 no analogy (contained letter combinations that do not exist in English or letters in positions in which they never occur in English; however, all are pronounceable following grapheme to phoneme rules). The first 6 types of pseudowords had orthographically similar neighbors, and the last type had no neighbors. All subjects were asked first to read a list of 40 real words, half of which were irregular, then asked to read the 122 pseudowords. All AD patients were able to read some pseudowords. They were mildly impaired relative to the controls in reading pseudowords with neighbors, but were markedly impaired in reading no analogy pseudowords when compared with controls. It is contended that pseudoword reading in AD patients is an automatic process that uses information drawn from the lexical net of real words and that this same process is used by normal adult readers. AD patients appear to lose the ancillary ability to apply consciously spelling-to-sound rules in decoding words and pseudowords.

KEANE, MARGARET M.; GABRIELI, JOHN D.E.; GROWDON, JOHN H.; & CORKIN, SUZANNE. (1994, March). Priming in perceptual identification of pseudowords is normal in Alzheimer's disease. *Neuropsychologia*, *32*, 343–356.

Examines the performance of Alzheimer's disease (AD) patients in perceptual identification of pseudowords. The final group of subjects included 12 AD patients and 12 controls. The mean age of the AD patients was 70.4 years; for controls, the mean age was 64.5 years. Stimuli consisted of 140 3-letter pronounceable pseudowords, 12 of which were filler items. Of the 128 pseudowords, half were used in the perceptual identification task and half in a recognition task. Subjects studied one list of pseudowords, performed a perceptual identification task with studied and unstudied pseudowords, then studied a different list of pseudowords and performed a yes/no recognition task with studied and unstudied pseudowords. The dependent measure was the time needed to identify pseudowords. AD patients showed normal priming in perceptual identification and impaired recognition memory. Along with previous supporting research, the findings are interpreted as indicating that a memory system spared in AD and in amnesia can support the acquisition and expression of new information. Preserved priming of words and pseudowords in AD may indicate the operation of perceptual processes localized to posterior visual circuits that are relatively spared in AD.

RAYMER, A.M., & BERNDT, R.S. (1994, October). Models of word reading: Evidence from Alzheimer's disease. *Brain and Language*, *47*, 479–482.

Uses a battery of lexical-semantic and reading tasks in examining the performance of two females with provisional diagnoses of Alzheimer's disease (AD). Patients were given a battery of experimental tasks: oral picture naming, oral name to auditory definition, oral word reading, written word/picture matching, written word/associated picture matching, picture/associated picture matching, and nonword reading. The first six tasks included the same 160 words, 80 with regular spelling and 80 with exceptional spelling; each list included 40 low-frequency, 20 mid-frequency, and 20 high-frequency words. For nonword reading, patients were given 55 nonwords with high- and low-probability grapheme-phoneme correspondences.

Performance in the three matching tasks indicated deficits of lexical comprehension and a severe semantic decline. Performances for oral naming and naming to definition were impaired also. The majority of naming errors were unrelated responses, perseverations, and omissions, indicating little preservation of semantic knowledge. One patient produced reading errors for 3% of known words and 6% of unknown words; the other patient produced errors for 32% known and 29% unknown words. These findings are interpreted as suggesting no relation between semantic knowledge and exception word reading. It is proposed that the findings provide evidence that nonsemantic lexical processes are available to support oral word reading.

GOODALL, W.C., & PHILLIPS, W.A. (1995). Three routes from print to sound: Evidence from a case of acquired dyslexia. *Cognitive Neuropsychology*, *12*(2), 113–147.

Presents a case study of an adult female stroke patient with a reading impairment found to be greater for nonwords than for words. Testing revealed her impairments to be in the assignment of phonemes to graphemes and in phonological assembly, but not in the visual recognition of letters and words, in graphemic parsing, or in phonological segmentation. Her ability to read nonwords that are close neighbors of words that she could read well was investigated. No evidence was found for reading by analogy. Nonwords were not often mistaken for real words to which they are close neighbors. Over a 7-year period, her reading of words improved significantly but her reading of unfamiliar nonwords did not. For this patient, the learning of sublexical print-to-sound correspondences was more impaired than the learning of direct whole-word print-to-sound correspondences. The improved reading of familiar wholes that have no distinctive meanings without the improved reading of their parts was felt to be evidence for processes that are lexical but not semantic. The effect of training with the patient appeared not to be due to improved sublexical processing. Findings supported theories that suggest a semantic route, a sublexical direct route, and a lexical direct route from print to sound.

MICELI, GABRIELE, & CARAMAZZA, ALFONSO. (1993). The assignment of word stress in oral reading: Evidence from a case of acquired dyslexia. *Cognitive Neuropsychology*, *10*(3), 273–296.

Reports on the performance of an Italian dyslexic patient whose reading performance at the segmental level was good, but who made a number of errors of stress during oral reading of common words. The patient was a 59-year-old male who had suffered from an ischemic stroke. A CT-scan performed about 1 year post onset revealed extensive damage to portions of the brain. The patient showed a severe aphasic disorder that was classified clinically as a jargon aphasia. He was severely impaired in processing sentences in both the auditory and the visual modality. Ability to comprehend active and passive reversible sentences was severely impaired. However, his ability to convert print to sound was good. He showed no difficulty in reading nonwords. There was difficulty in reading aloud words with lexically assigned stress. Stress assignment errors were felt to be the result of damage to the phonological output lexicon. His pattern of performance was interpreted as support for the hypothesis that the phonological representations computed in speech production do not simply consist of ordered sequences of phonemes, but rather of multidimensional representations that specify, among other things, syllabic structure.

HILLIS, ARGYE E., & CARAMAZZA, ALFONSO. (1995, March). Spatially specific deficits in processing graphemic representations in reading and writing. *Brain and Language*, *48*, 263–308.

Reports on the spelling and reading performance of two brain-damaged female adults, ages 59 and 65. Spelling errors on all tasks (written naming, written and oral spelling, and delayed copy transcription) were almost exclusively on the right half of words in the case of one patient and on the left half of words for the other. In each instance, the errors occurred con-

tralaterally to the side of the brain damage. The patterns of performance are interpreted as indicative of damage at the level of the grapheme description computed in all spelling tasks. The relation between the spatially specific impairments found in reading and writing and their relation to spatially specific deficits in nonlexical tasks is reviewed. It is contended that different forms of spatially specific deficits in reading and spelling may reflect different underlying deficits and may be associated with differing types of spatial neglect in nonlexical tasks.

NOEL, MARIE-PASCALE, & SERON, XAVIER. (1993). Arabic number reading deficit: A single case study or when 236 is read (2306) and judged superior to 1258. *Cognitive Neuropsychology*, *10*(4), 317–339.

Describes a single case study of a 64-year-old female with a specific disorder in reading Arabic numbers. Neurological examinations revealed an evolving moderate cerebral atrophy but no other focal neurological lesion. She showed cognitive deficits in several areas and these worsened. Her speech output was fluent with a moderate anomia. Her reading capacity was normal for letters, but a dissociation was found between the reading of words (39/40) and nonwords (16/30); there was no influence of lexical variables. An evaluation of the patient's difficulties with numbers revealed that some of her abilities were preserved, but that she had major difficulties on a counting task in both oral and written modalities. She had poor results in number comparison tasks and in perceptual estimation of quantities. Her mental arithmetical capacities were weak. She was not able to write down or solve any written calculation and was able to estimate the results of some operations only. A specific analysis was made of her errors in reading Arabic numbers, with a distinction made between lexical and syntactic errors. The majority of her errors were of the syntactic type in which she had difficulty with the number's magnitude (e.g., 34 read as 304; 340 read as 3,400). Errors were primarily in numbers of 3 or more digits. Results supported the hypothesis that there was a deficit in the syntactic module of the Arabic comprehension system. An alternative explanation was that when presented with a number of 3 or more digits, the patient would activate degraded digit or syntactic frames that would be used to produce a verbal entry code, and this would then be used to elaborate a semantic representation.

SEMENZA, CARLO, & VIGLIOCCO, GABRIELLA. (1994, October). A variety of phonological dyslexia: The lack of interaction between reading subroutines. *Brain and Language*, *47*, 439–441.

Describes a developmental phonological dyslexic patient who showed no advantage of dialect word over nonword reading. The patient was a 22-year-old male who had been suffering grand mal seizures since age 4. The Wechsler Adult Intelligence Scale resulted in an IQ of 88. Although his spoken language was within normal limits and he had attended school for 10 years, he had not been able to fully develop writing and oral reading skills. He spoke standard Italian as well as the dialect of the region where he was born and had lived. The patient was given a list of 112 words, three different lists of 30 high-frequency dialect words, and three lists of 25 nonwords, comparable in length and phonological complexity with the dialect words. He was trained on one list of dialect words and one list of nonwords for 7 days. His performance was tested on the trained lists and two new lists (one dialect and one nonword). For another 7-day period, he was trained on the two new lists and, then administered the whole real word list, the second week's lists, and two new lists (dialect and nonword). He did not show a preference for reading dialect words over nonwords. The authors consider the reading of dialect words equivalent to reading pseudohomophones since they are assumed to have no place in the visual input lexicon but are represented in the phonological lexicon. The patient appeared unable to profit from stored phonological lexical information. It is hypothesized that an interaction between lexical and sublexical processes may be important in the acquisition of reading skills.

VI–5 Other atypical learners

ERICKSON, KAREN A., & KOPPENHAVER, DAVID A. (1995). Developing a literacy program for children with severe disabilities. *The Reading Teacher, 48*, 676–684.

Discusses an instructional literacy program developed for severely disabled children. Eight children, ages 5 to 11, were enrolled. Seven of the eight were in wheelchairs; six had cerebral palsy, one had spina bifida, and one had a degenerative disease. Three were severely speech impaired and had no formal way to communicate. The children had been in four different types of programs prior to being grouped together. All had made little academic progress in previous programs. The instructional program was designed by a special educator, a speech pathologist, and an instructional support team working together to provide an integrated approach. Individual computers were provided for part of the instruction in language arts and math. Some group computer activities were used also. Four of the eight children were returned to their elementary schools the following year. Implications for reading teachers are presented.

SEPEHR, HAMID; HARRIS, DUNCAN; & HARRI-AUGSTEIN, SHEILA. (1994). An inquiry into a conversational framework to support literacy-learning in an E.B.D. school. In Alison B. Littlefair (Ed.), *Literacy for life* (pp. 60–67). Cheshire, England: United Kingdom Reading Association.

Focuses on the literacy and learning practices observed during learning-support sessions for seven boys exhibiting emotional and behavioral difficulties (EBD) from a primary residential special school. Seven case studies of boys, ages 8 to 12, were selected for close examination based on their difficulties in reading. The boys refused to read and exhibited high anxiety when confronted with any literacy-related experience. Observations of small group instruction were conducted over 14 months. Throughout the observation period, the researcher adopted a participant role and introduced the school to a literacy-learning model that encourages numerous opportunities for learning conversations and self-organized learning. Reflections on the conversational process are the focus of the report.

LIGHT, JANICE; BINGER, CATHY; & SMITH, ALISON KELFORD. (1994, December). Story reading interactions between preschoolers who use AAC and their mothers. *Augmentative and Alternative Communication, 10*, 254–268.

Investigates the story reading interaction patterns with mothers of five preschoolers with severe physical and speech impairments. All of the children were between the ages of 2 and 5, had cerebral palsy with severe speech impairments, and were using augmentative and alternative communication (AAC). The children and their mothers were videotaped in two 10-minute sessions reading a familiar book and an unfamiliar book. The following communication modes were recorded: speech, unintelligible vocalizations, eye pointing, facial expression, gestures, pointing, actions on objects and pictures (patting the dog, kissing the baby, knocking on the door), sign language, and communication board output. Coding categories were developed for mother and child communicative acts. Frequencies and proportions of the communicative behaviors of mothers and children were calculated, and means and standard deviations were calculated for the group. Although there was individual variation across the 5 dyads, some general patterns of interaction emerged. The mothers dominated the exchanges and children forfeited many of their communicative opportunities. Interactions were synchronous and all dyads shared a focus in the interactions. The topic of the interaction was defined by the story, and communications acts by both members of the dyad focused on the story. Off-topic comments were infrequent. Patterns of interaction tended to be similar across familiar and unfamiliar books. Children tended to rely on unaided modes of communication.

Journals Monitored
Annual Summary of Investigations Relating to Reading
July 1, 1993 to June 30, 1994

Action in Teacher Education
Adolescence
Adult Education Quarterly
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Alberta Journal of Educational Research
American Annals of the Deaf
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American Journal of Education
American Journal of Psychology
American Journal of Sociology
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Balanced Reading Instruction
Book Collector
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Brain & Language
Brain: A Journal of Neurology
British Journal of Educational Psychology
British Journal of Educational Technology
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British Journal of Special Education
California Reader, The
Canadian and International Education
Canadian Journal of Psychology
Canadian Modern Language Review
Canadian Psychology
Cartographic Journal
Child Development
Child Psychiatry and Human Development
Childhood Education
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Clearing House, The
Cognition and Instruction
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Colorado Communicator
Colorado Reading Council Journal
Communication and Cognition
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Educational Gerontology: An International Quarterly
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Educational Leadership
Educational Psychologist
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Educational Research Quarterly
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Educational Technology
Educational Technology Research and Development
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English in Australia
English Journal
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Exceptional Children
Florida Reading Quarterly
Focus
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Imagination, Cognition, & Personality
Imprint
Indiana Reading Quarterly
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International Journal of Disability, Development, & Education
International Information and Library Review
International Research in Reading
International Review of Education
Intervention in School and Clinic
Iowa Reading Journal
Irish Journal of Education
Journal of Abnormal Child Psychology
Journal of Adolescent & Adult Literacy
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Journal of Aesthetic Education
Journal of American Optometric Association
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Journal of Experimental Child Psychology
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Journal of Psycholinguistic Research
Journal of Psychology
Journal of Reading
Journal of Reading Behavior
Journal of Reading Education
Journal of Reading, Writing, and Learning Disabilities International
Journal of Research and Development in Education
Journal of Research in Childhood Education
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Journal of Research in Reading
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Journal of the Acoustical Society of America
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Journal of Visual Impairment and Blindness
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Linguistic Inquiry
Linguistics: An Interdisciplinary Journal of the Language Sciences
Literacy: Issues and Practices
Literacy, Teaching and Learning
Mass Communication Review
Measurement and Evaluation in Counseling and Development
Memory and Cognition
Merrill-Palmer Quarterly
Minnesota Reading Association Highlights
Mississippi Reading Journal
Modern Language Journal
Monographs in Language and Reading Studies
Monographs of the Society for Research in Child Development
National Association for Secondary School Principals Bulletin

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Northwest Reading Journal
Oklahoma Reader, The
Optometry & Vision Science
Peabody Journal of Education
Perception and Psychophysics
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Phi Delta Kappan
Poetics
Poetics Today
Professional Psychology: Research and Practice
Prospects: Quarterly Review of Education
Psychological Medicine
Psychological Record
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Psychological Review
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Public Opinion Quarterly
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Reading
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Reading Improvement
Reading in a Foreign Language
Reading in Virginia
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Reading Psychology
Reading Research and Instruction
Reading Research Quarterly
Reading Teacher, The
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RELC Journal
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Research and Teaching in Developmental Education
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Review of Education, The
Review of Educational Research
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School Library Media Quarterly
School Psychology International
School Psychology Quarterly
School Psychology Review
School Science & Mathematics
Science Education
Science of Reading
Sex Roles
Social Education
Sociology of Education
State of Reading, The
Studies in Second Language Acquisition
Teachers College Record
Teaching Exceptional Children
Teaching Pre K–8
Technological Horizons in Education Journal
TESOL Quarterly
Texas Reading Report
Text
Theory and Research in Social Education
Theory into Practice
Topics in Language Disorders
Urban Education
Urban Review
Visible Language
Vision Research
Volta Review
Written Communication
WSRA Journal

Author Index, Annual Summary of Investigations Relating to Reading, July 1, 1994, to June 30, 1995

The following index includes the names of all the authors of reports in the summary followed by the part (Roman numeral), section (Arabic number), and page number(s) in the summary where the citation and short abstracts for the report by that author can be found. All authors, whether they are the first author or the name given subsequent to that in a joint effort, are listed in this index. The names of single authors and of first authors in a joint article are italicized. When the report is by two authors, the entry here for the first author given is followed by the last name of the other author and both names are italicized. When there are three or more authors, the entry for the first author is followed by et al. The Roman face (nonitalicized) entries in this index are the names of the authors given subsequent to the first author named.

A

Ackerman, Peggy T. et al.: IV–1, p. 53; VI–3, p. 172
Adelman, Nancy E.: V–10, pp. 157–158
Adoni, Hanna: III–5, p. 33
Afflerbach, Peter: IV–16, p. 99
Albrecht, Jason E. et al.: IV–2, pp. 113–114
Aldridge, Jerry: IV–20, p. 108
Allen, Diane D.: II–3, pp. 16–17; II–4, p. 22
Allen, Virginia Garibaldi: II–1, pp. 4–5
Allen, Virginia Garibaldi et al.: II–1, p. 4
Allington, Richard et al.: V–1, p. 127
Almasi, Janice F.: IV–15, p. 96
Almasi, Janice F. et al.: IV–23, p. 125
Alteri, Jennifer L.: IV–15, p. 97
Alvermann, Donna E. et al.: IV–13, p. 88
Alworth, Martha: III–8, p. 37
Ambardar, Anita K.: II–3, pp. 18–19
Anders, Particia L.: II–1, p. 6; II–3, p. 19; II–5, p. 24
Anderson, Jim: IV–20, p. 108
Anderson, Jim & Lee: II–5, pp. 24–25; V–13, p. 168
Anderson, Rebecca S. & Reid: II–3, p. 16
Anderson, Richard C.: IV–11, pp. 83–84
Angell, Andrea L.: IV–15, p. 98; V–3, p. 130
Annett, Marian: IV–1, p. 57
Appel, Valentine: III–12, p. 44
Applegate, Anthony: V–7, p. 143
Applegate, Mary DeKonty et al.: V–7, p. 143
Arnold, Paul & Horner: VI–2, p. 171
Askew, Billie J. & Fraser: V–10, p. 150
Askov, Eunice N.: III–8, pp. 37–38
Atkinson, Dwight: IV–8, p. 76
Atwood, L. Erwin: III–15, p. 47
Aufderheide, Patricia: III–1, pp. 26–27
Austin, Erica Weintraub & Dong: III–16, p. 50
Avila, Enrique: IV–22, p. 118
Awad, Angela: V–10, p. 152
Awaida, May & Berch: IV–6, p. 69

B

Baddeley, Alan D.: IV–9, pp. 79, 80
Baden, William W.: IV–19, p. 106
Bailey, Ian L.: VI–1, p. 170
Baker, David W.: III–8, p. 41
Baker, Kim: V–1, p. 127
Baluch, Bahman: IV–1, pp. 52–53
Bamberg, Harold W.: IV–11, p. 85
Barbieri, Maria Silva & Landolfi: IV–8, p. 73
Barone, Thomas: IV–14, p. 95
Barron, Bennie G. & Tyree: V–4, p. 135
Bartel, Beverly: V–7, p. 144
Bartlett, Andrea: II–3, pp. 17–18
Bartlett, Cissy & McBride: V–3, p. 130
Basil, Michael D. & Brown: III–16, p. 49
Beach, Sara Ann: V–3, p. 131
Bean, Rita M. et al.: II–5, p. 23
Bean, Thomas W.: II–2, p. 11
Beck Isabel L.: IV–21, p. 115
Beck, Isabel L. et al.: IV–22, pp. 117–118
Bedell, Harold E.: VI–1, pp. 169–170
Beech, John R.: IV–6, p. 69
Beentjes, Johannes W. J. & van der Voort: IV–8, p. 72
Behrmann, Marlene: VI–4, p. 175
Beisembaeva, Zhanat Abaevna: III–6, p. 35
Bergeron, Bette S.: II–4, p. 22
Bergeron, Bette S. & Rudenga: V–9, pp. 148–149
Berghoff, Beth: IV–14, pp. 90–91
Berndt, R.S.: VI–4, pp. 177–178
Berry, Glen: IV–1, p. 54
Biemiller, Andrew: V–2, p. 129
Binger, Cathy: VI–5, p. 180
Biscaldi, Monica: IV–1, p. 55
Bistodeau, Linda: IV–21, p. 116
Biswas, Rahul et al.: III–4, p. 32
Black, Sharon & McOmber: III–8, pp. 40–41
Blatchford, Peter et al.: II–1, p. 3
Blick, Kenneth A.: IV–9, p. 81
Boardman, Graham & Hughes: IV–10, p. 83
Bodle, John V.: III–14, pp. 45–46
Bos, Candace S. & Anders: II–5, p. 24
Bosma, J.: VI–1, pp. 168–169
Bosman, Anna M.T. & de Groot: IV–6, pp. 67–68
Bowey, Judith A. & Hansen: IV–9, p. 78
Bowey, Judith A. et al.: IV–14, pp. 91–92
Box, Jean Ann & Aldridge: IV–20, p. 108
Bradford, Clare: III–13, p. 45
Bral, Conna: V–8, p. 145
Brandt, Rhett: IV–11, p. 85

BEST COPY AVAILABLE

Branson, Terri A.: VI–3, pp. 172–173
Brashers, Dale E.: III–17, p. 51
Brember, Ivy: V–1, pp. 126–127
Brenna, Beverly A.: IV–21, p. 112
Breznitz, Zvia et al.: IV–12, p. 87
Briand, Kevin: IV–1, pp. 54–55
Bridge, Connie A.: V–2, p. 128
Bristor, Valerie J.: V–5, p. 138
Brock, Cynthia H. & Raphael: IV–22, pp. 123–124
Bronk, Genevieve: IV–16, p. 102
Brown, Warren S.: IV–14, p. 93
Brown, William J.: III–16, p. 49
Browne, Beverley: IV–9, pp. 80–81
Brozo, William G.: V–8, p. 146
Bruning, Roger: IV–22, p. 118
Bullimore, Mark A. & Bailey: VI–1, p. 170
Bullion-Mears, Ann: II–3, p. 17
Burns, Daniel J.: IV–5, p. 66
Burroughs, Robert: V–6, p. 141
Bus, Adriana G.: IV–14, p. 90
Byrne, Brian: IV–14, pp. 93–94
Byrne, Janice: V–5, pp. 137–138

C

Cain, Mary T.: IV–14, pp. 91–92
Cairney, Trevor H.: V–6, p. 142
Cairney, Trevor H. & Munsie: V–10, p. 156
Calero-Breckheimer, Ayxa & Goetz: IV–21, p. 117
Calfee, Robert C. et al.: IV–22, pp. 121–122
Calvo, Manuel G. & Carreiras: IV–21, pp. 115–116
Cameron, Glen T. & Curtin: III–10, pp. 42–43
Campbell, Robin: II–1, pp. 5–6
Campbell, Robin & Stott: V–4, p. 132
Capasso, Rita: VI–4, pp. 175–176
Caramazza, Alfonso: VI–4, pp. 175–176, 178–179
Cardinal, Bradley J. & Seidler: IV–19, p. 106
Carpenter, R.H.S.: IV–1, p. 54
Carpini, Michael X. Delli et al.: III–5, pp. 33–34
Carreiras, Manuel: IV–21, pp. 115–116
Carroll, Jacquelin H. & Christenson: V–5, pp. 138–139
Carver, Ronald P.: IV–19, p. 106
Carver, Ronald P. & Liebert: V–5, p. 138
Catlett, Terri: III–2, p. 27
Cawley, John F. & Parmar: VI–3, p. 172
Ceprano, Maria A.: I, p. 2
Chaffee, Steven H.: III–1 p. 26
Champion, Sandra: III–7, p. 35
Chan, Lorna K.: IV–18, pp. 105
Chandler, Daisy & Aldridge: IV–20, p. 108
Chapman, James W. & Tunmer: IV–18, pp. 104–105
Cheek, Dallas H. et al.: II–2, pp. 8–9
Cherian, Varghese I. & Thomas: IV–16, pp. 101–102
Cherney, Elaine: V–7, p. 144
Chew, Fiona: III–1, pp. 25–26
Chi, Feng-ming: IV–21, p. 116
Chinn, Clark A. et al.: IV–11, pp. 83–84
Chittenden, Edward: V–12, p. 161
Christenson, Charlene Noelani-Kahuanui: V–5, pp. 138–139
Chrzastowski, Tina E. & Schmidt: III–6, p. 34
Cipolotti, Lisa: VI–4, p. 176
Clay, Marie M.: V–10, pp. 149–150
Clements, Nancy E.: III–13, p. 45
Codling, Rose Marie: IV–16, pp. 99–100
Coenen, R.: IV–12, p. 86
Cole, Peter G. & Mengler: IV–14, p. 90
Collingnon, Francine Filipik: III–8, p. 38
Collins, Belva C.: VI–3, pp. 172–173
Coltheart, Veronika: IV–9, p. 78
Come, Barbara & Fredericks: II–5, p. 23
Commander, Nannette Evans & Smith: V–7, p. 143
Commeyras, Michelle: V–4, p. 133
Cone, Joan Kernan: IV–16, pp. 100–101
Conners, Joan L.: III–10, p. 42
Connor, Beth: V–5, pp. 137–138
Cook, Anna: IV–1, p. 52
Coombs, William T.: V–5, p. 137
Cooper, Jill: IV–16, pp. 102–103
Coppock, John: IV–21, p. 115
Corkin, Suzanne: VI–4, p. 177
Corly, Martin M.B.: IV–21, p. 113
Cornelissen, Piers et al.: IV–1, pp. 53–54
Cornelius, Georgiana: II–1, p. 8
Cosgrove, Maryellen S.: II–1, p. 8
Cothern, Nancy B.: V–10, p. 153
Coulson, David C.: III–10, pp. 41–42
Coulson, David C. & Hansen: III–2, p. 30
Courtney, Leigh: II–4, pp. 22–23
Coward, John M.: III–11, p. 43
Cox, Beverly E. Griffin & Dixey: IV–20, p. 109
Cox, Carolyn et al.: V–10, p. 151
Craig, Madge T. & Yore: IV–21, p. 113
Crain, Stephen: IV–14, pp. 93–94
Crain-Thoreson, Catherine: IV–22, pp. 122
Crone, D.A.: V–3, p. 130
Cummings, Rebecca: IV–2, pp. 57–58
Cunningham, James W.: II–1, pp. 7–8
Curtin, Patricia A.: III–10, pp. 42–43

D

Dahl, Karin L.: IV–14, p. 95
Dahl, Karin L. & Freppon: V–4, p. 133
Dana, Marion E.: IV–17, p. 104
Darch, Craig: V–12, p. 164
Das, J.P. et al.: V–10, pp. 154–155
Dautrich, Barbara R. IV–6, p. 66
Davies, Bronwyn: IV–2, p. 57
Davies, Julie et al.: V–1, pp. 126–127
Davinroy, Kathryn H. & Hiebert: II–2, pp. 10–11
Davis, Brandon: IV–3, p. 59
Davis, James N. & Bistodeau: IV–21, p. 116
Davis, Joel J.: III–16, p. 50
Davis, Terry C.: III–8, p. 41
Davou, Bettina et al.: IV–5, p. 64
Dean, Raymond S.: IV–3, p. 59
de Avila, Marcia et al.: III–8, p. 37
DeBaryshe, Barbara D.: IV–15, p. 98
De Bleser, R. et al.: VI–4, p. 174
DeFord, Diane E.: V–10, p. 150
DeFries, John C.: IV–1, pp. 55–56
de Geus, Wendy C. & Reitsma: IV–8, pp. 74–75
de Groot, Annette M.B.: IV–6, pp. 67–68
Delazer, M. et al.: VI–4, p. 176

deManrique, Ana M. Borzone & Signorini: IV–20, p. 111
DeMarco, Anthony: IV–12, p. 87
Demetrulias, Diana Maver: V–8, pp. 144–145
Denes, G.: VI–4, p. 176
Dennis, Douglas: IV–1, pp. 51–52
Deno, Stanley L.: IV–14, pp. 92–93
D'Entremont, Barbara: IV–1, pp. 54–55
Dickson, Sandra H.: III–2, p. 30
Dilena, Mike & van Kraayenoord: V–12, pp. 161–162
Dillon, Ken & Williams: III–14, p. 46
DiPillo, Mary Lou & Leone: II–2, p. 14
Dixey, Brenda P.: IV–20, p. 109
Dixon-Krauss, Lisbeth A.: V–4, p. 133
Dobbins, D. Alan: IV–14, p. 90
Doctor, Estelle: VI–4, p. 175
Dole, Janice A. et al.: V–6, pp. 140–141
Dong, Qingwen: III–16, p. 50
Donin, Janet & Silva: IV–8, pp. 75–76
Donmoyer, Robert & Kos: IV–14, p. 94
Donoghue, John R.: V–12, p. 166
Dopkins, Stephen: IV–22, pp. 118–119
Doughdrill, Carolyn: V–10, p. 151
Douglas, Sheila & Willatts: IV–13, p. 88
Doyle, Mary Anne E.: I, p. 2
Drasdo, Neville: IV–1, p. 52
Drew, Dan: III–1, p. 26
Duffelmeyer, Frederick A. et al.: V–12, p. 164
Dugas, Michel: IV–14, p. 91
Dunlap, Kristy L.: IV–22, pp. 121–122
Dunn, Loraine et al.: V–3, p. 131
Durrant, Cal & Hargreaves: V–13, p. 166
Dykman, Roscoe A.: IV–1, p. 53; VI–3, p. 172
Dynak, Janet & Smith: II–3, pp. 14–15

E

Eaves, Ronald C. et al.: V–12, p. 164
Echevarria, Jana & McDonough: V–11, p. 159
Edwards, Patricia A.: III–8, p. 36
Edwards, Patricia A. & Garcia: V–3, pp. 130–131
Eilers, Rebecca E.: IV–7, p. 69
Einstein, Gilles O.: IV–5, pp. 64–65
Elley, Warwick B.: IV–17, p. 103
Elliot, Mona: V–10, p. 151
Ellis, Andrew: IV–5, p. 63
Elster, Charles: IV–20, p. 107; IV–21, pp. 111–112
Enciso, Patricia E.: V–5, p. 137
Epstein, J.N.: V–3, p. 130
Erickson, Karen A. & Koppenhaver: VI–5, p. 180
Escamilla, Kathy: V–11, p. 158
Escobar, Michael D.: IV–14, pp. 89–90
Espin, Christine A. & Deno: IV–14, pp. 92–93
Estrin, Ellen & Proctor: V–9, p. 149
Evans, Bruce J.W. et al.: IV–1, p. 52
Evans, Carol A.: IV–15, p. 99
Evans, Karen S.: II–2, pp. 11–12
Evans, Rick: III–16, pp. 48–49
Evans, William: III–2, pp. 28–29
Evershed, Jamie: IV–8, pp. 72–73

F

Faiss, C.: VI–4, p. 174
Fallone, Anthony R. & Balach: IV–1, pp. 52–53
Fang, Zhihui: V–11, p. 160
Farmer, Mary: IV–1, pp. 54–55
Farnan, Nancy & Kelly: IV–22, p. 123
Farr, Marcia & Guerra: III–8, p. 37
Fasheh, Munir Jamil: III–7, p. 35
Faust, Mark A.: II–5, pp. 23–24
Fawcett, Angela J. & Nicolson: VI–3, p. 173
Feldman, Jerome: IV–12, p. 86
Ferguson, Eva Dreikurs: IV–9, p. 79
Ferguson, Sarah: VI–4, p. 177
Fey, Marion: V–13, p. 167
Fillenworth, Ceil: III–16, p. 49
Finnegan, John R., Jr.: III–2, p. 29
Fischel, J.E.: V–3, p. 130
Fischer, Burkhart et al.: IV–1, p. 55
Fischer, Robyn: V–4, pp. 131–132
Fishman, Andrea E.: IV–13, pp. 88–89
Flannagan, Dorothy A. & Blick: IV–9, p. 81
Fletcher, Charles R.: IV–21, pp. 116–117
Fletcher, Jack M.: IV–14, pp. 89–90
Flood, James et al.: II–3, p. 19
Ford, Karen L.: IV–14, pp. 95–96
Foster, Tor: II–3, p. 18
Fowler, Sue: IV–1, pp. 53–54
Fowler, Teri Jo: II–3, p. 15; IV–8, p. 71
Fox, Dana: II–2, p. 11
Frackowiak, R.S.J.: IV–1, p. 53
Frasier, Dianne F.: V–10, p. 150
Fredericks, Anthony D.: II–5, p. 23
Freeman, Carole Cook: IV–13, pp. 87–88
Freeman, Evelyn B.: II–1 pp. 4–5
French, Joyce N.: III–8, pp. 39–40
Freppon, Penny A.: V–4, pp. 132, 133
Friedman, Rhonda B. et al.: VI–4, p. 177
Fuchs, Douglas: V–10, pp. 155–156
Fuchs, Lynn S.: IV–22, p. 120; V–10, pp. 155–156
Fyfe, Stephen A.: V–12, p. 164

G

Gabrieli, John D.E.: VI–4, p. 177
Gallagher, Phyllis: IV–20, p. 107
Gallimore, Ronald: IV–15, pp. 98–99
Gallini, Joan K. & Spires: IV–5, p. 62
Gallini, Joan K. et al.: IV–5, p. 61
Gambrell, Linda B.: IV–16, pp. 99–100; IV–23, p. 125
Gao, Dandan: III–3, p. 31
Garcia, Georgia Earnest: II–1, p. 5; V–3, pp. 130–131
Garnham, Alan: IV–21, p. 113
Gaskins, Irene W. et al.: V–5, pp. 137–138
Gathercole, Susan E. & Baddeley: IV–9, p. 79
Gathercole, Susan E. et al.: IV–9, p. 80
Gayatri, Gati: III–2, p. 31
Geer, James H. et al.: IV–2, p. 59
Gérard, Christophe: IV–14, p. 91
Gerlach, Jeanne M.: IV–16, p. 101
Gernsbacher, Morton Ann: IV–5, pp. 61–62
Gillam, Ronald B. & Johnston: IV–8, p. 72
Gillespie, Cindy S. et al.: III–13, p. 45
Gillingham, Mark G.: IV–22, pp. 119–120

Gipe, Joan P.: II–1, p. 7
Glez, Juan E. Jiménez & Lopez: IV–3, p. 60
Goetz, Ernest T.: IV–21, p. 117; IV–22, p. 118
Goldenberg, Claude & Patthey-Chavez: IV–8, p. 74
Goldenberg, Claude et al.: IV–15, pp. 98–99
Goodall, W.C. & Phillips: VI–4, p. 178
Goyen, Judith D. & McClelland: V–10, pp. 151–152
Graham, Norris A.: IV–7, p. 70
Graves, Michael F.: IV–9, pp. 81–82
Gray, Jeffrey W. et al.: IV–3, p. 59
Greco, Albert N.: III–12, pp. 43–44
Greenberg, Seth N. & Koriat: IV–6, p. 68
Gregory, Eve: IV–20, pp. 107–108
Gridley, Betty E.: V–12, p. 163
Griffin, Jeffrey L. & Stevenson: III–16, p. 50
Grindler, Martha C.: IV–17, p. 103
Grogan, S.C.: V–12, pp. 163–164
Groner, Rudolf: IV–8, p. 76; IV–20, pp. 110–111
Gross-Glenn, Karen: IV–7, p. 69
Growdon, John H.: VI–4, p. 177
Guerra, Juan C.: III–8, p. 37
Guice, Sherry: V–1, p. 127
Guice, Sherry & Johnston: IV–18, p. 105
Guimãraes, Ana Sofia & Youngman: II–2, p. 13
Gunther, Albert C. et al.: III–14, p. 47
Guthrie, John T.: V–5, pp. 137–138
Guthrie, John T. et al.: IV–16, p. 99
Gutierrez-Villalobos, Sonia et al.: III–2, p. 30
Guzzetti, Barbara J.: IV–21, p. 114
Guzzetti, Barbara J. et al.: V–8, p. 145

H

Hacquebord, Hilde: IV–22, p. 124
Haenggi, Dieter & Perfetti: IV–22, p. 121
Haenggi, Dieter et al.: IV–5, pp. 61–62
Hague, Sally A. & Scott: V–11, pp. 160–161
Hakerem, Gad: IV–12, p. 87
Hall, Christine K. & Leist: V–12, p. 165
Hall, Lynda K.: IV–13, p. 89
Hall, Meada: VI–3, pp. 172–173
Haman, Ales: III–5, p. 33
Hamilton, Mary Lynn: II–5, p. 24
Hamilton, Rebecca: II–5, p. 23
Hampton, Stephanie: V–10, p. 152
Handel, Ruth D.: V–5, p. 139
Handy, Dolores: V–6, p. 140
Hanley, J. Richard: IV–6, p. 67
Hannah, C. Lynne de Shore: IV–3, pp. 59–60
Hannavy, Sybil: V–12, p. 163
Hansen, Anne: III–2, p. 30
Hansen, Julie: IV–9, p. 78
Hansen, Kathleen A. et al.: III–10, p. 42
Harcourt, Keith: IV–16, p. 101
Hargreaves, Sandra: V–13, p. 166
Harri-Augstein, Sheila: VI–5, p. 180
Harris, Duncan: VI–5 p. 180
Harris, Richard Jackson: IV–21, pp. 114–115
Harris, Violet J.: IV–23, p. 126
Hartland, Sue & Harcourt: IV–16, p. 101
Hartley, James: III–3, p. 31
Harwood, Kerri: IV–20, p. 111
Hatt, Alison et al.: II–3, p. 18
Haugland, Ann: III–12, p. 44
Hawes, Shirl: V–9, pp. 147–148
Hawkins, Darnell F.: III–2, pp. 30–31
Haynes, Jacqueline B.: V–13, pp. 166–167
Head, Martha: V–2, pp. 128–129
Heckner, M.: IV–12, p. 86
Hedgcock, John & Atkinson: IV–8, p. 76
Henk, William A.: V–8, p. 146
Henk, William A. & Melnick: V–12, pp. 162–163
Henry, Lucy A.: IV–3, p. 60
Hertog, James K.: III–2, p. 30
Hertog, James K. et al.: III–2, p. 29
Hiebert, Elfrieda: II–2, pp. 10–11
Hieshima, Joyce A.: II–3, pp. 18–19
Higgins, Eleanor: IV–14, p. 94
Hill, Sara Louisa et al.: II–5, p. 25
Hillis, Argye E.: VI–4, pp. 178–179
Hillman, Judith: IV–21, p. 112
Hinchman, Kathleen A.: IV–13, p. 88
Hirai, Seiya & Shimizu: IV–5, p. 65
Hodge, Janie Pate: V–10, pp. 155–156
Hoeppner, D.: IV–12, p. 86
Hoff, Laurie R.: II–4, p. 21
Hoffman, James V. & Isaacs: IV–11, p. 84
Holland, Keith: IV–1, pp. 51–52
Hollingsworth, Paul M.: II–2, p. 7
Holmes, Vicki L.: III–8, p. 36
Hong, Yah-huei: III–14, p. 47
Hopkins, Linda: IV–10, pp. 82–83
Horiba, Yukie et al.: IV–21 pp. 116–117
Horner, Louise: VI–2, p. 171
Horton, Keith D. & McKenzie: IV–6, p. 68
Horton, Steven V. & Lovitt: V–12, pp. 165–166
House, J. Daniel & Wohlt: IV–2, p. 58
Howard, D.: IV–1, p. 53
Howard, Joseph: III–8, p. 41
Huang, H.S. & Hanley: IV–6, p. 67
Huck, Gerhard & Howard: III–8, p. 41
Huff, Lillian: V–10, p. 152
Huffman, Denise: V–10, p. 152
Hughes, John: IV–10, p. 83
Huitema, John S. et al.: IV–22, pp. 118–119
Hulme, Charles: IV–5, p. 63
Hurford, David P. & Sanders: IV–14, p. 91
Hurford, David P. et al.: V–10, p. 152
Hurley, Sandra Rollins: IV–1, p. 52
Hynd, Cynthia R.: V–8, p. 145
Hynds, Ernest C.: III–10, p. 42

I

Ido, Osamu: V–11, p. 160
Indrisano, Roselmina: II–3, p. 18
Inhoff, Albrecht Werner: IV–1, pp. 56–57
Ireson, Judith: II–1, p. 3
Isaacs, Mary Ellen: IV–11, p. 84
Itkonen, Tiina: VI–3, p. 173
Iwanaga, Masafumi: IV–10, p. 82

J

Jackson, Francesina & Cunningham: II–1, pp. 7–8
Jackson, Sally et al.: III–17, p. 51

Jackson, Sheryl: IV–2, p. 59
Jacobs, Arthur M.: IV–1, p. 54
Jacoby, Larry L.: IV–9, pp. 77–78
Jallad, Bonnie: IV–7, p. 69
Jared, Debra & Seidenberg: IV–9, p. 77
Jenkins, Stephen J.: IV–17, p. 103
Jenkinson, Dave: III–14, p. 46
Jennings, Joyce H. et al.: II–3, pp. 18–19
Jennings, Robert E.: V–9, p. 147
Jeremiah, Milford A.: IV–2, pp. 58–59
Johnson, Marcia K.: IV–9, p. 81
Johnston, Judith R.: IV–8, p. 72
Johnston, Mark: V–10, p. 152
Johnston, Peter H.: IV–18, p. 105
Johnstone, John W.C. et al.: III–2, pp. 30–31
Jolliffe, Lee & Catlett: III–2, p. 27
Jones, H. Jon et al.: V–5, p. 137
Jongsma, Kathleen S.: I, p. 2
Joscelyne, Trish: II–1, p. 3
Jou, Jerwen & Harris: IV–21, pp. 114–115
Joy, Kenneth L.: IV–3, p. 59
Judge, John J.: V–12, p. 165
Judice, Sandra: IV–2, p. 59
Juliano, Christine: V–10, p. 152
Junge, Kathleen: IV–22, p. 124
Jurden, Frank H. & Reese: IV–13, p. 89

K

Kahn, Emily: III–2, p. 29
Kail, Robert & Hall: IV–13, p. 89
Keane, Margaret M. et al.: VI–4, p. 177
Kear, Dennis J. & Potthoff: V–12, p. 161
Keeter, Scott: III–5, pp. 33–34
Kelly, Leonard P.: VI–2, p. 171
Kelly, Particia R.: IV–22, p. 123
Kemp, Marsha: IV–8, p. 71
Kennamer, J. David: III–5, pp. 33–34
Kennedy, Craig H. et al.: VI–3, p. 173
Kerr, Paul W.: IV–1, p. 54
Kershner, John R. et al.: VI–4, p. 174
Kershner, John R. & Graham: IV–7, p. 70
Kertoy, Marilyn K.: IV–20, pp. 109–110
Kibby, Michael W.: V–1, p. 126
Kieffer, Ronald D. & Faust: II–5, pp. 23–24
Kieffer, Ronald D. & Morrison: II–5, p. 25
King, Bruce W. et al.: V–12, p. 165
King, Erika G.: III–2, pp. 29–30
King, Erika G.: III–2, p. 29
King, Karen Whitehill: III–2, p. 28
Kinsler, Veronica & Carpenter: IV–1, p. 54
Kintsch, Walter: IV–5, pp. 61–62
Kirkpatrick, Terry: VI–4, p. 174
Kirkpatrick, Vicki: V–10, p. 151
Klass, Donald W.: VI–4, p. 174
Klein, Denise et al.: VI–4, p. 175
Klein, Raymond et al.: IV–1, pp. 54–55
Klin, Celia M.: IV–22, pp. 118–119
Knapp, Michael S. et al.: V–10, pp. 157–158
Koda, Keiko: IV–5, p. 66
Koenig, A.J. et al.: VI–1, p. 169
Kolodziejska, Jadwiga: III–14, p. 46
Konopak, Bonnie C. & Williams: II–1, p. 5
Konopak, Bonnie C. et al.: II–2, p. 12
Kontos, Susan: V–3, p. 131
Koppenhaver, David A.: VI–5, p. 180
Koriat, Asher: IV–6, p. 68
Kos, Raylene: IV–14, p. 94
Kos, Raylene: IV–14, pp. 95, 96
Kotlarek, F.: VI–4, p. 174
Kreshel, Peggy J.: III–2, p. 28
Krischer, C.C. et al.: IV–12, p. 86
Kruse, Anne E.: V–12, p. 164
Kucer, Stephen B.: V–11, pp. 158–159
Kuiken, Don: IV–17, p. 104

L

Lacy, Stephen & Ramsey: III–2, p. 28
Laframboise, Kathryn & Wynn: V–11, p. 159
L'Allier, Susan: III–8, pp. 35–36
Lambert, Janet: V–13, pp. 167–168
Landolfi, Liliana: IV–8, p. 73
Lapp, Diane: II–3, p. 19
Larson, Richard L.: I, p. 2
Larson, Richard L. & Saks: I, p. 2
Lawrence, Anne H.: II–5, p. 25
Laxon, Veronica et al.: IV–9, pp. 77, 78
Layton, C.A.: VI–1, p. 169
Lazarus, Belinda Davis & McKenna: V–12, p. 162
Leal, Dorothy J.: IV–22, pp. 122–123
Leather, Cathy V. & Henry: IV–3, p. 60
Lednicky, Donna: III–8, p. 37
Lee, Andrea: II–5, pp. 24–25; V–13, p. 168
Lee-Sammons, William H. & Whitney: IV–5, pp. 63–64
Lehman, Barbara A.: II–1, p. 4
Lehman, Barbara A. et al.: II–1, pp. 4–5
Leist, Cathy Wade: V–12, p. 165
Lenski, Susan Davis: V–4, p. 135
Leonard, Laurence B.: IV–9, p. 79
Leone, Susan: II–2, p. 14
Leong, Che Kan: V–5, p. 139
Lepik, Aira: III–5, p. 33
Lepore, Jill: III–9, p. 41
Lester, Paul Martin: III–2, p. 28
Leto, Deborah J.: V–10, p. 157
Leung, Susan Wilson: V–12, pp. 164–165
Lewandowski, Lawrence et al.: IV–5, p. 62
Lewis, Charles & Neville: III–2, pp. 27–28
Lewis, Maureen: IV–16, p. 100
Li, Shouming: V–1, p. 127
Liebert, Robert E.: V–5, p. 138
Light, Jacquelyn Gillis & DeFries: IV–1, pp. 55–56
Light, Janice et al.: VI–5, p. 180
Lindquist, Kristin: VI–3, p. 173
Lindsey, Tamara P.: IV– 20, p. 110
Lingard, Tony: V–6, p. 142
Liva, Angeline & Pugh: IV–11, p. 84
Livingston, Gary: III–4, p. 32
Lloyd, Carol V. & Anders: II–1, p. 6
Lockhart, Alison: V–4, p. 134
Lofton, Glenda & Head: V–2, pp. 128–129
Logan, John W.: IV–20, p. 110
Lohr, Linda: V–9, p. 146
Lomax, Richard G.: II–4, pp. 22–23
López, Mercedes Rodrigo: IV–3, p. 60

Lorch, Robert F., Jr.: IV–22, p. 121
Loshin, David S.: VI–1, pp. 169–170
Lovitt, Thomas C.: V–12, pp. 165–166
Loxterman, Jane A. et al.: IV–21, p. 115
Luke, Allan: III–8, p. 39
Lundberg, Ingvar: V–13, p. 167
Lyons, Nona: II–3, p. 17

M

Mabbott, Ann Sax: IV–8, pp. 76–77
MacArthur, Charles A. & Haynes: V–13, pp. 166–167
Macaruso, Paul et al.: IV–14, pp. 93–94
MacGillivray, Laurie & Hawes: V–9, pp. 147–148
MacGregor, Mollie & Stacey: V–1, pp. 127–128
MacMartin, Morag: IV–22, pp. 124–125
Makuch, Robert: IV–14, pp. 89–90
Malicky, Grace V. & Norman: III–8, p. 39
Marder, Camille: V–10, pp. 157–158
Maria, Katherine & Junge: IV–22, p. 124
Markee, Taryn E.: IV–14, p. 93
Martin, Wendy & Eversheď: IV–8, pp. 72–73
Martinelli, Kathleen A. & Chaffee: III–1, p. 26
Martinez, Miriam & Roser: IV–8, p. 71
Mason, Alexandra: IV–1, pp. 53–54
Mason, Robert A.: IV–21, pp. 113–114
Masterson, Jacqueline: IV–9, pp. 77, 78
Mathes, Patricia: V–10, pp. 155–156
Mathes, Patricia G. & Fuchs: IV–22, p. 120
Maughan, Barbara: IV–18, p. 104
May, James G.: IV–1, p. 51
Mayers, Pamela: IV–16, p. 100
McBride, Lesa: V–3, p. 130
McClelland, David J.: V–10, pp. 151–152
McCollum, Heather: V–10, pp. 157–158
McConkie, George W. et al.: IV–1, p. 54
McCoy, Kenneth: IV–3, p. 59
McCutchen, Deborah & Crain-Thoreson: IV–22, p. 122
McDaniel, Mark A.: IV–5, pp. 65–66
McDaniel, Mark A. & Einstein: IV–5, pp. 64–65
McDonough, Renee: V–11, p. 159
McDougall, Siné et al.: IV–5, p. 63
McGee, Lea M. et al.: II–4, pp. 22–23
McGeorge, Kimberly: V–10, p. 152
McGlathery, Donald G.: III–5, p. 34; III–12, pp. 44–45
McGregor, Karla K. & Leonard: IV–9, p. 79
McIntosh, David: V–12, p. 163
McIntyre, Ellen & Freppon: V–4, p. 132
McKenzie, Barbara D.: IV–6, p. 68
McKenna, Michael C.: IV–23, p. 125; V–12, p. 162
McKenna, Michael C. et al.: IV–17, p. 103
McKeown, Margaret G.: IV–21, p. 115; IV–22, pp. 117–118
McKinney, C. Warren: V–5, p. 137
McKoon, Gail & Ratcliff: IV–5, p. 62
McLain, K. Victoria Mayer et al.: V–12, p. 163
McLaren, Dana: VI–4, p. 174
McLaughlin, Margaret A.: V–8, pp. 145–146
McLean, Mari M.: II–1, pp. 6–7
McLeod, Douglas M. & Perse: III–15, p. 48
McMahon, Susan I.: V–5, p. 136
McNear, D.: VI–1, pp. 168–169
McNelis, Mary: V–9, p. 146
McNinch, George: V–9, p. 147
McOmber, Rachel: III–8, pp. 40–41
McShane, Steven L.: III–2, p. 27
Medwell, Jane: II–2, pp. 12–13
Meissen, R.: IV–12, p. 86
Meister, Carla: V–9, p. 147
Melnick, Steven A.: V–12, pp. 162–163
Mengler, Elise D.: IV–14, p. 90
Menter, Ian: II–3, p. 18
Merkley, Donna J.: V–12, p. 164
Merlin, Shirley B.: III–8, p. 40
Merry, Roger & Peutrill: V–10, p. 154
Miall, David S. & Kuiken: IV–17, p. 104
Miceli, Gabriele & Caramazza: VI–4, p. 178
Miceli, Gabriele et al.: VI–4, pp. 175–176
Michaelson, Nancy: V–1, p. 127
Michener, Arthur: III–2, pp. 30–31
Minnis, Michele: V–7, pp. 143–144
Mirenda Pat: IV–20, p. 111
Mishra, Rama K.: V–10, pp. 154–155
Mitchell, Don C. et al.: IV–21, p. 113
Mitchell, Judy N.: II–3, pp. 19–20
Mohr, Kathleen: II–3, p. 15
Moje, Elizabeth B.: II–2, p. 12
Moje, Elizabeth B. & Handy: V–6, p. 140
Mokhtari, Kouider: III–4, p. 32
Monk, Andrew: IV–5, p. 63
Moore, David W.: IV–13, p. 88
Moore, DeWayne & Zabrucky: III–16, pp. 49–50
Moore, Juel: II–3, p. 19
Moore, Lawrence H. et al.: IV–14, p. 93
Moore, Phillip J. & Schofield: IV–4, p. 61
Moore, Ramona C.: II–1, p. 7
Moore, Shelly: V–10, p. 152
Moore, Walter J.: I, p. 2
Morgan, Kenneth B.: V–4, pp. 133–134
Morrison, Linda S.: II–5, p. 25
Mosenthal, James: II–3, p. 16
Mottley, Reed: V–9, p. 147
Moulton, Margaret "Cookie" & Holmes: III–8, p. 36
Mueller, Angela: V–10, p. 152
Mulhern, Margaret: V–11, p. 160
Munsie, Lynne: V–10, p. 156
Murata, Natsuko: IV–5, p. 65
Muspratt, Sandy: V–8, p. 145
Myers, Jerome L.: IV–21, pp. 113–114; IV–22, pp. 118–119

N

Nagal, Greta: V–9, p. 149
Nakata, Martin & Muspratt: V–8, p. 145
Nathan, Ruth: V–4, p. 135
Neal, Jeanette: V–10, p. 152
Needels, Margaret C.: V–10, pp. 157–158
Nepote, Paula: V–10, p. 152
Neuman, Susan B. & Fischer: V–4, pp. 131–132
Neuman, Susan B. & Gallagher: IV–20, p. 107
Neuzil, Mark: III–10, p. 42
Neville, John: III–2, pp. 27–28
Newell, George E. & Winograd: V–6, pp. 141–142
Newton, Joseph E.O.: IV–1, p. 53; VI–3, p. 172

Nickels, Lyndsey: IV–11, p. 85
Nicolson, Roderick I.: VI–3, p. 173
Nist, Sherrie L. & Simpson: V–7, p. 143
Noel, Marie-Pascal & Seron: VI–4, p. 179
Noll, Elizabeth: III–14, p. 45
Norman, Charles A.: III–8, p. 39
Norris, Stephen P. & Phillips: IV–22, p. 122
Nurss, Joanne R. et al.: III–8, p. 41
Nwakeze, Peter C. & Seiler: III–8, p. 39

O

O'Brien, Edward J.: IV–21, pp. 113–114
Oderman, Anita: V–10, p. 151
Oglesby, D. Michael: IV–1, p. 53; VI–3, p. 172
O'Hear, Michael F.: IV–19, p. 106
O'Keefe, Daniel J.: III–17, p. 51
Oldfather, Penny: IV–13, p. 88
Olson, James R. & Singer: II–2, p. 13
Olson, Mary W. et al.: IV–20, p. 110
Osaka, Mariko et al.: IV–8, p. 76; IV–20, pp. 110–111
Osaka, Naoyuki: IV–8, p. 76; IV–20, pp. 110–111
Ostertag, Joyce: V–5, pp. 137–138
Owen, Pam: II–3, pp. 15–16

P–Q

Padilla, Christine: V–10, pp. 157–158
Pagnucco, Joan R.: IV–23, p. 125
Palmer, Barbara Martin: IV–23, p. 125
Palmer, Barbara Martin et al.: IV–16, pp. 99–100
Panofsky, Carolyn P.: IV–8, p. 73
Paradis, Edward E.: II–3, p. 20
Paratore, Jeanne R. & Indrisano: II–3, p. 18
Paris, Scott G.: II–1, pp. 2–3
Parker, Ruth M.: III–8, p. 41
Parmar, Rene S.: VI–3, p. 172
Patterson, K.: IV–1, p. 53
Patthey-Chavez, Genevieve: IV–8, p. 74
Payne, Adam C.: V–3, p. 130
Payne, Adam C. et al.: IV–15, p. 98
Pearce, Daniel L.: II–3, pp. 18–19
Peereman, Ronald: IV–9, p. 80
Perfetti, Charles A.: IV–11, pp. 85–86; IV–22, p. 121
Perse, Elizabeth M.: III–15, p. 48
Peter, Jeanne: IV–20, p. 110
Petra, Otto: IV–1, p. 55
Peutrill, Irene: V–10, p. 154
Phelps, Stephen & Weidler: II–3, p. 14
Phelps, Stephen F.: IV–13, p. 88
Phillips, Jerry: V–5, pp. 139–140
Phillips, Linda M.: IV–22, p. 122
Phillips, W.A.: VI–4, p. 178
Picoult, Jonathan & Johnson: IV–9, p. 81
Piersma, Mary L. & Allen: II–4, p. 22
Placier, Peggy & Hamilton: II–5, p. 24
Plaut, David C. & Shallice: VI–4, p. 175
Pluck, Meryl-Lynn: V–10, p. 152
Polland, Mark: V–1, p. 127
Pomroy, Norma: V–10, p. 151
Pool, Judith E.: V–10, pp. 154–155
Potthoff, Dennis E.: V–12, p. 161
Pottorff, Donald D.: V–6, p. 141
Powell, Janet L.: III–13, p. 45
Powers, Donald E. & Leung: V–12, pp. 164–165
Pressley, Michael: IV–23, p. 125
Pressley, Michael: V–2, p. 129
Price, C.J. et al.: IV–1, p. 53
Pritsos, Maritza K.: II–5, p. 25
Proctor, Vikki: V–9, p. 149
Pruitt, Katy: III–8, p. 37
Pugh, A.L.: IV–11, p. 84
Pumfrey, Peter: V–1, pp. 126–127
Purcell-Gates, Victoria et al.: III–8, pp. 35–36
Quinn, Kathleen Benson: V–7, p. 143

R

Rabia, Salim Abu & Siegel: IV–22, p. 120
Radhakrishnan, Kurupath et al.: VI–4, p. 174
Ramirez, Juan Daniel: III–8, pp. 38–39
Rampal, Kuldip R.: III–14, p. 47
Ramsey, Karyn A.: III–2, p. 28
Ramsey, Richard N. et al.: IV–19, p. 106
Ranck-Buhr, Wendy: II–3, p. 19
Rankin, Joan L. et al.: IV–20, p. 111
Raphael, Taffy E.: IV–22, pp. 123–124
Raphael, Taffy E. & McMahon: V–5, p. 136
Raskind, Marshall H. & Higgins: IV–14, p. 94
Rasool, Joan A.: V–12, p. 165
Ratcliff, Roger: IV–5, p. 62
Rathbone, Elizabeth A.: IV–5, p. 62
Rauch, Margaret & Fillenworth: III–16, p. 49
Raymer, A.M. & Berndt: VI–4, pp. 177–178
Readence, John E.: II–2, p. 12
Reading Recovery in New Zealand: V–2, p. 129
Reading Today: V–1, p. 126
Reddix, Michael D.: IV–1, p. 54
Reese, Hayne W.: IV–13, p. 89
Reese, Leslie: IV–15, pp. 98–99
Reid, Leonard N. et al.: III–2, p. 28
Reid, Suzanne: II–3, p. 16
Reitsma, Pieter: IV–8, pp. 74–75
Reul, J.: VI–4, p. 174
Reutzel, D. Ray et al.: II–1, p. 7
Rhoder, Carol A. & French: III–8, pp. 39–40
Rice, Gary E.: IV–22, p. 119
Rice, Jo Mary: V–10, p. 153
Richards, Ian L.: IV–1, p. 52
Richards, Janet C. et al.: II–1, p. 7
Richardson, Alex: IV–1, pp. 53–54
Richardson, Virginia: II–2, p. 9
Richardson, Virginia & Anders: II–3, p. 19
Richgels, Donald J.: IV–8, p. 70
Rickey, Melissa J.: II–1, pp. 3–4
Riffe, Daniel: III–4, p. 32
Riley, Sylvia: II–3, p. 18
Rinehart, Steven D.: II–4, pp. 21–22
Rinehart, Steven D. et al.: IV–16, p. 101
Robinson, Daniel H.: IV–11, p. 85
Robinson, Susan: VI–4, p. 177
Rodriguez, Lulu: III–14, p. 47
Rodriguez-Brown, Flora: V–11, p. 160
Roe, Mary F.: II–3, pp. 20–21
Rogers, Theresa & McLean: II–1, pp. 6–7
Roig, Miguel & Ryan: IV–2, p. 58

BEST COPY AVAILABLE

Romani, Cristina & Stringer: IV–14, p. 92
Rosenberg, Sheila Otto & Alworth: III–8, p. 37
Rosenberger, Bernhard: III–10, p. 43
Rosenshine, Barak & Meister: V–9, p. 147
Roser, Nancy L.: I, p. 2; IV–8, p. 71
Roskos, Kathleen & Walker: II–2, p. 10
Ross, D.B.: VI–1, p. 169
Ross, Felecia G. Jones: III–11, p. 43
Ross, Steven M. & Smith: V–4, pp. 134–135
Ross, Steven M. et al.: V–9, p. 146
Rowe, Deborah Wells: IV–20, p. 109
Royer, James M.: IV–21, p. 113
Rubert, Helene: V–10, p. 157
Rucinski, Cindi A. & Garcia: II–1, p. 5
Rudenga, Elizabeth A.: V–9, pp. 148–149
Ruoff, Laima & Hillman: IV–21, p. 112
Rupley, William H.: II–2, pp. 8–9
Rush, Ramona R.: III–2, p. 30
Ryan, Robert: IV–2, p. 58
Ryan, Sharon M.: IV–14, pp. 91–92
Ryder, Randall J. & Graves: IV–9, pp. 81–82

S

Sadoski, Mark et al.: IV–22, p. 118
Saks, A.L.: I, p. 2
Saks, A.L. & Larsen: I, p. 2
Salinger, Terry & Chittenden: V–12, p. 161
Sampson, Mary Beth: IV–8, p. 71
Sanders, Raymond E.: IV–14, p. 91
Satcher, Jamie F.: IV–11, p. 85
Satlow, Eric: V–5, pp. 137–138
Saxby, Maurice: IV–8, p. 75
Schafer, William: IV–16, p. 99
Scharer, Patricia L.: II–1, p. 4
Schirmer, Barbara R.: VI–2, p. 171
Schmidt, Karen A.: III–6, p. 34
Schmidt, Patricia Ruggiano: IV–15, p. 97
Schofield, Neville J.: IV–4, p. 61
Schommer, Marlene: IV–11, pp. 83–84
Schraw, Gregory et al.: IV–22, p. 118
Schreiber, Peter A.: IV–11, pp. 84–85
Schreuder, Robert: V–10, p. 154
Schunk, Dale H. & Rice: V–10, p. 153
Schwartz, M.: VI–4, p. 174
Scott, Renée: V–11, pp. 160–161
Seaborg, Mary Beth: IV–8, p. 71
Seaborg, Mary Beth et al.: II–3, p. 15
Seaman, Michael A.: IV–5, p. 61
Seidenberg, Mark S.: IV–9, p. 77
Seidler, Todd L.: IV–19, p. 106
Seiler, Lauren H.: III–8, p. 39
Seki, Keiko et al.: VI–4, p. 175
Semenza, C.: VI–4, p. 176
Semenza, Carlo & Vigliocco: VI–4, p. 179
Sepehr, Hamid et al.: VI–5, p. 180
Sepura, Barbara J.: V–4, pp. 135–136
Seron, Xavier: VI–4, p. 179
Shafrir, Uri & Siegel: IV–14, p. 93
Shah, Hemant & Gavatri: III–2, p. 31
Shallice, Tim: VI–4, p. 175
Shammi, Prathiba: IV–12, p. 87
Shanahan, Timothy et al.: V–11, p. 160
Shankweiler, Donald: IV–14, pp. 93–94
Shapiro, Sheila: II–3, pp. 18–19
Sharpe, M. et al.: VI–1, pp. 168–169
Shaywitz, Bennett A.: IV–14, pp. 89–90
Shaywitz, Sally E. et al.: IV–14, pp. 89–90
Sheory, Ravi et al.: III–4, p. 32
Sheilds, Patrick M.: V–10, pp. 157–158
Shimizu, Akiko: IV–5, p. 65
Shimoda, Todd A.: IV–12, pp. 86–87
Shonerd, Henry: IV–8, p. 75
Shore, Bruce M.: IV–3, pp. 59–60
Siegel, Linda S.: IV–14, p. 93; IV–22, p. 120
Signorini, Angela: IV–20, p. 111
Silbert, Peter L.: VI–4, p. 174
Silva, Maria: IV–8, pp. 75–76
Simmons, Deborah C. et al.: V–10, pp. 155–156
Simpson, Michele L.: V–7, p. 143
Sinatra, Gale M. & Royer: IV–21, p. 113
Singer, Marti: II–2, p. 13
Sippola, Arne E.: II–1, p. 3
Six, Linda: V–5, pp. 137–138
Skeels, Stephanie A.: V–8, p. 145
Skinner, Christopher H. et al.: IV–11, p. 85
Slavin, Robert E.: V–9, p. 148
Sloan, Christopher: V–6, pp. 140–141
Smagorinsky, Peter & Coppock: IV–21, p. 115
Smith, Alison Kelford: VI–5, p. 180
Smith, Bob: IV–9, p. 77
Smith, Brenda D.: V–7, p. 143
Smith, Dorothy: III–8, pp. 35–36
Smith, Helen K.: I, p. 2
Smith, Lana J.: V–4, pp. 134–135; V–9, p. 146
Smith, Larry W.: IV–8, pp. 73–74
Smith, Mary Jo: II–3, pp. 14–15
Smith, Nancy: V–10, p. 151
Soda, Takeshiro et al.: V–11, p. 160
Solan, Harold A. et al.: IV–12, p. 86
Solman, Robert: IV–1, p. 51
Spires, Hiller: IV–5, p. 62
Stacey, Kaye: V–1, pp. 127–128
Stage, Scott A. & Wagner: IV–8, pp. 71–72
Stahl, Norman A. et al.: V–8, p. 146
Stahl, Steven A. et al.: IV–23, p. 125
Stansell, John C.: II–3, p. 15
Steffens, Michele L. et al.: IV–7, p. 69
Stein, John: IV–1, pp. 53–54
Stelmakh, V.D.: III–5, pp. 32–33
Ste-Marie, Diane M. & Jacoby: IV–9, pp. 77–78
Stevens, Robert J. & Slavin: V–9, p. 148
Stevenson, Robert L.: III–16, p. 50
Stewart, Roger A. & Paradise: II–3, p. 20
Stott, Gillian: V–4, p. 132
Stoya, Susan: V–10, p. 155
Stratton, Beverly D.: IV–17, p. 103
Strickland, Dorothy: IV–16, p. 102
Stringer, Mark: IV–14, p. 92
Stromquist, Nelly P.: III–8, p. 39
Sudweeks, Richard: II–1, p. 7
Sugishita, Morihiro: VI–4, p. 175
Sunderland, Trey: VI–4, p. 177
Svoboda, Carla: IV–22, p. 118
Swanson, H. Lee & Trahan: IV–5, p. 63
Swearingen, Rebecca A.: III–13, p. 45

T

Takuda, Katsumi: VI–1, p. 170
Talty, Fran: IV–16, p. 102
Tatro, Clayton: V–10, p. 152
Taylor, Fitz: IV–5, p. 64
Taylor, Ronald L.: III–8, p. 38
Telfer, Richard J. et al.: V–9, p. 147
Tellegen, Saskia: IV–17, p. 104
Terry, Suzanne: IV–5, p. 61
Theberge, David C.: IV–14, p. 93
Thomas, Karen F. & Rinehart: II–4, pp. 21–22
Thomas, Varghese: IV–16, pp. 101–102
Thrash, Esther C.: IV–13, p. 88
Tidwell, Deborah L. & Mitchell: II–3, pp. 19–20
Trahan, Marcille F.: IV–5, p. 63
Trathen, Woodrow: V–6, pp. 140–141
Triggs, Teal: III–12, p. 44
Trovato, Charlene A.: II–5, p. 23
Truscott, Diane M.: I, p. 2
Truscott, Diane M. & Rickey: II–1, pp. 3–4
Tujak, Laura: IV–12, p. 86
Tunmer, William E.: IV–18, pp. 104–105
Turnbull, Brenda J.: V–10, pp. 157–158
Tyree, Amanda: V–4, p. 135
Tyrrell, Ruth et al.: IV–1, pp. 51–52

U

Umezawa, Minoru: IV–10, p. 82
Unsworth, Len & Lockhart: V–4, p. 134
Unwin, Cynthia G.: V–10, p. 156

V

Valdois, Sylviane et al.: IV–14, p. 91
Van, Brinda: V–7, p. 144
Vanault, Patricia: IV–14, p. 91
van Bon, Wim H.J.: V–10, p. 154
van den Bosch, Karel et al.: V–10, p. 154
van den Broek, Paul W.: IV–21, pp. 116–117
van der Bolt, Lilian & Tellegen: IV–17, p. 104
van der Leij, Aryan: IV–1, p. 55
van der Voort, Tom H.A.: IV–8, p. 72
Van Dyke, Janice: V–13, p. 168
van IJzendoorn, Marinus H. & Bus: IV–14, p. 90
van Kraayenoord, Christina E.: V–12, pp. 161–162
van Kraayenoord, Christina E. & Paris: II–1, pp. 2–3
Vermeer, Jan P.: III–15, p. 48
Viglocco, Gabriella: VI–4, p. 179
Villaume, Susan Kidd & Hopkins: IV–10, pp. 82–83

W

Waddill, Paula J. & McDaniel: IV–5, pp. 65–66
Waggoner, Martha A.: IV–11, pp. 83–84
Wagner, Richard K.: IV–8, pp. 71–72
Wales, M. Lynn: III–8, p. 40
Walker, Barbara: II–2, p. 10
Wall, Audrey Nixon: III–2, p. 27
Wallace, Benjamin: IV–6, pp. 68–69
Wallis, Kathleen M.: IV–20, p. 108
Walmsley, Sean: IV–16, p. 102
Walsh-Childers, Kim: III–15, pp. 47–48
Wang, Yuh Yin: IV–16, p. 99
Wanta, Wayne & Gao: III–3, p. 31
Ward, Angela: V–9, p. 148
Ward, Jean: III–10, p. 42
Wat, Albert Y.: IV–22, pp. 121–122
Waterman, Betsy B.: IV–5, p. 62
Waters-Kemp, Phyllis A.: IV–11, p. 85
Watson, J.D.G.: IV–1, p. 53
Watts, Susan M.: I, p. 2
Weaver, David & Drew: III–1, p. 26
Weaver, Dera: IV–13, p. 88
Weidler, Sarah D.: II–3, p. 14
Weinberger, Jo: IV–15, p. 97
Weiner, Sue: IV–9, p. 78
Weintraub, Sam et al.: I, p. 2
Weiss, Kenneth et al.: IV–16, p. 102
Wells, Roberta A. & King: III–2, pp. 29–30
Wensveen, Janice M. et al.: VI–1, pp. 169–170
Wham, Mary Ann: II–2, pp. 9–10
Wham, Mary Ann & Lenski: V–4, p. 135
White, Brian F.: IV–22, pp. 120–121
White, Jane et al.: IV–8, p. 71
Whitehurst, Grover J. et al.: V–3, p. 130
Whitehurst, Grover J.: IV–15, p. 98
Whitney, Paul: IV–5, pp. 63–64
Wilke, Jurgen & Rosenberger: III–10, p. 43
Wilkins, Arnold: IV–1, pp. 51–52
Wilkinson, Ian A.G.: IV–11, pp. 83–84
Willatts, Peter: IV–13, p. 88
Williams, Claire Louise: III–14, p. 46
Williams, Mark V.: III–8, p. 41
Williams, Mary C. et al.: IV–1, p. 51
Williams, Nancy L.: II–1, p. 5
Williams, Phyllis: V–12, p. 164
Williams, Wayne O.: V–8, p. 145
Willis, Catherine: IV–9, p. 80
Wilson, Elizabeth K.: II–2, p. 12
Wilson, Victor L.: II–2, pp. 8–9
Winchester, Katherine: V–12, p. 164
Winograd, Peter: V–6, pp. 141–142
Wise, R.J.S.: IV–1, p. 53
Wisell, Diana L.: IV–16, p. 101
Wohlt, Victoria: IV–2, p. 58
Wolf, Darlene F.: V–12, p. 162
Wollman-Bonilla, Julie E.: V–5, pp. 136–137
Worrall, Norman: IV–5, p. 64
Worthy, Jo: IV–22, pp. 117–118
Wray, David & Lewis: IV–16, p. 100
Wray, David & Medwell: II–2, pp. 12–13
Wynes, Barbara J.: III–8, p. 36
Wynn, Margie: V–11, p. 159

Y

Yajima, Mariko: VI–4, p. 175
Yap, Regina L. & van der Leij: IV–1, p. 55
Yokoyama, Azuma: V–11, p. 160
Yore, Larry D.: IV–21, p. 113
Young, Josephine Peyton: IV–13, p. 88
Youngman, Michael: II–2, p. 13

Z

Zabrucky, Karen: III–16, pp. 49–50
Zakaluk, Beverley L. & Wynes: III–8, p. 36
Zalewski, Patricia: IV–13, p. 88
Zhang, Sulan & Perfetti: IV–11, pp. 85–86
Zhou, Hong: IV–1, p. 51
Zientarski, Deborah Phelps & Pottorff: V–6, p. 141
Zillmann, Dolf: III–4, p. 32
Zola, David: IV–1, p. 54
Zucker, Andrew A.: V–10, pp. 157–158
Zvi, Jennifer C.: IV–14, p. 93

INTERNATIONAL
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August 1996

203

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